

Client/Project: Tierra Solutions, Inc - Painesville, OH

Preservative:

None

Matrix:

Soil

SDG:

PNV88

Sample # Range of Entry Group: 4692565-72

Bottle Type: (96) 500ml glass

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
4692565-72	208 Da Neelen	SA Hold Storage	1/20/06	1120	Entry to Storage	
4692505-72	SA Hold Storage	Sfreigh 1201 Main Storage	1-20-06	1340	Homos + Sib	
4692565-72	SFreish 1201	main storage	1-2004	1435	Storage	
4652565-72	Main Storage	1842 J-BOWLLS	1-20-010	1537	ESTILLINE THEK	,
4652565-72 4652565-72	1292 1. Boxels	Main Storage	1-20-06	1549	Hosage	
		/		·		<u> </u>
`			<u> </u>			
		·				
					, , , , , , , , , , , , , , , , , , , ,	9217



Client/Project: Tierra Solutions, Inc - Painesville, OH

Preservative:

NaOH/ascorbic acid

Matrix:

WW GMC 1/21/00 ⊕મ \\મ\/દ• PNV60 કેશ્ર

SDG:

Sample # Range of Entry Group: 4693387, 470

Bottle Type: (02) 500 ml plastic

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
4693387	Olyur	SA Hold Storage	1/21/06	<i>(</i> 330	Entry to Storage	
4693381	PIONAC	5. BED	ا علا، نكه	cqu5	Storege	
LIL93387	SAIRCIQ SHOTOGE SAIRCIPTAGE	main	1.741.06	প্রেক্ত	storage	
		3				
		·				ļ
·						
·						8260

Secure Storage Chain of Custody Subsample

Client/Project: Tierra Solutions, Inc-Pair	nesville, OH
	Matrix: Soul
Sample # Range for Entry Group: 4693565-72	Bottle Type: (62) 402 plantic cop compasite
SDG: PNV88	composite

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
4692545-72	Studen 1201	Storgs-	1-20-of	1435	Storagy	
4692565-72	main Storage	AM shipton to	1-29-06	18:00	metals prep Storage	Х
4692565-72	AM Shiplon B	main storage		23:00	Storage	
	-					
		,				
				<u>-</u>		
	:		- "		,	
		-				
						9219

Pg.1-62

Secure Storage Chain of Custody Subsample

Client/Project: Tierra Solutions, Inc-Pa	ainesville off
Preservative: NONE	Matrix: Soi(
Sample # Range for Entry Group: 4692565-72	Bottle Type: 21 1000m 1 91955
SDG: PNV88	Composite (20) 500ml glass
	Dia Cuta

					(2) 3311	11 4/10100
Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
4692565-22	11201	rain Storage	1-20.06	1435	Storage	
4697565-72	MENTAL	1111424	1.73.06	5:30	715 Semi Soil Sourcetral	
4697565-72	MM474	Mary Storage	1-23-06	6100	storage	
4692565-72	Main storage	Smy 1234	1/23/06	1700	PH	
4692565-72	Siny 1224	Main Horage	1/23/06	1900	storage.	
4692865-72	naen Storige	SFreista 120i	1-24-04	1715	Moist	
4692565-72	lifteisher 1201	Storge	1-2400	1734	Storag	
4692565-72	main storage	Damls. S. I	1-24-06	2135	crite digest	λ
4692565-72	Daniel S.S.T	main Stomest	1-25-06	0235	Storage	
469 2565-12	Man Storage	Maraher 1313	1-25-06	0600	CLP Rest Extraction	X
4642565-72	Danier 1313	Main Storage	1-25-04	661C	4 orage	
469.2565-72	Man	cyTian 1242	01-25-06	10:45	cnies	X
4692565-72	c47in	Man_ storage	01-25-16	12:15	Storage	
4692565-72	storze	Daniel S. S. It	1-25-04	2100	cr digert	
4692565-72	Samil SSJ	main Storze	1-26-04	0330	Sitoral	
4692565-72	moults Storage	Mecidia 1026	1-30-66	0730	7557	
4692565-72	mah-	morn	. 1-30-00	0145	Storage	9229



Client/Project: Tierra Sol	utions, Inc Par	inesville, l	0 H	
Preservative: <u>HN03</u>	Matrix: ω	ater	_ SDG:	PN V6088
Sample # Range of Entry Group:	4693387		_ Bottle T	ype: (08) 500 ml pleatic

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
4693387	964 C. C. C	SA Hold 6 Stores	1/21/06	1330	Entry to Stone	8
4693387	sa nord s	3.1383 30006	1.2Mat	1030	buchak	
4693387	2000c	main Storage	1.9U.C6	1035	Gorage	
4693387	maiu Storaje	n Mary	1.24.06	15.00	Heg disestion	X
469 3387	11. maru,	meily	1.24.06	20 00	Main Storage	
4693387	MAIN SBIDGE	21184	1/26/06	17:45	MOTAN PLEP.	\tau_
4693387	1184	MAIN SBIAji	1/26/06	25:00	STOSASE	-
469 33 87	Main Storage	Helen School	1/28/06	00:15	metala Prop	X
4693387	Helen Schools	Stoney	1/28/06	05:30	Storage	
469338)	MAIN	1184	1/29/06	18:50	metals Plat.	+
4693387	21184	MAI'N Jærala	1/29/06	23:00	STOLAGE	
				· · · · · · · · · · · · · · · · · · ·		
						9221



Client/Project: Tierra Solutions	
Sample #: 469 2565 - 72	SDG: PNV88
Digest Type (circle one): Hg Metals GF	(If not 1, fill in)
Batch No: 0 6 0 2 9	1849 001

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody		
4692565-72	AM Shipkonts 0862	ICP locked Storage	1-30-06	02:35	netals/ICPlacked storage		
4693565-72	TCP LOCKER	Suhman	1-30-06	9:05	TOPHOS		
469365-72	S. Whomas N.J.	TOPAU STOTASE	130-06	9.75	Lastor ASC		
4692565-72	ICP Lockey StorAse	5, Whowas	354-1677 70-4-04	10130	TCPANUSIS		
4692565-72	S. Whomen ILM	Iched StorAse	2-4-06	10.40	ICPUCEU LOSTOTASC		
4692565-72	ICP COCKED	S. Wherew 1677	2/8/00	9:00	ICP ANALYSIS		
4692565-72	5. Whow 1677	JCP LOCKED Storpse	2/8/04	9:10	telled Lourage Storage		
			-				
3231.01							



Client/Project: /rcry Solution	J
Sample #: <u>46</u> 73382	SDG: <u>-</u> PN V 8€
Digest Type (circle one): Hg Metals GF	Trial No: 3 (If not 1, fill in)
Batch No: 06029	5720001

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody
4693387	1194	Inched JOIAN	01/30/06	Co: 13	metals / Inf pel Locked SBIATE
4693387	TCP LOCKED STONAGE	EE64 420	01/30/06	00135	ICP Analysis
4693387	Eby 420	Ich of Low Storage	01/30/06	04:35	ICP Storage
		-			
-					
				<u> · </u>	9723 1 of



Client/Project: Tierra Solutions		
Sample #: 4692565 - 72	SDG:	PNV88
Digest Type (circle one): Hg Metals GF	Trial No:	(If not 1, fill in)
Batch No: 0 6 0 2 9	0494	001

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody
4692565-72	Ain Stipkovits 0862	metals preproun Locked storage	1-30-do	00:45	Custody metals/metals prep/preprocom /locked storage 149 Analysis
4692565-72	Prop Room Storage	D. Valentin	1-3006	11:20	Ha Analysis
					· ·
					622 of /



Client/Project: Tierra Solutions, Ine - Peiinsesvil, OH

Sample #: 4693387 SDG: PNV88

Digest Type (circle one): Hg Metals GF Trial No: (If not 1, fill in)

Batch No: 06024 0821 0001

Cample Number(s) in	•		Date of	Time of	Reason for
Sample Number(s) in Custody	Released By	Received By	Transfer	Transfer	Change of Custody
4693387	n. marin 823	9680 9680	1/24/06	20 30	Hadisestian Tust 9680 Hadrayes
4693387	Inst+# 9480	D. Valentia	12506	04:20	Hapmayer
		2224.04	<u> </u>		<u>8235</u> of

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Type I Data Package for Tierra Solutions, Inc.

SDG# PNV88

> PA Cert. # 36-037 NY Cert. # 10670 NJ Cert. # PA011 NC Cert. # 521

Prepared by	Jessica Dam	
Reviewed by	Judrey McCline	<u> </u>
Date	217-06	

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Sample Reference List for SDG Number PNV88 with a Data Package Type of I

06101 - Tierra Solutions, Inc.Project: Painesville, OH

Lab Sample	Lab Sample	
<u>Number</u>	<u>Code</u>	Client Sample Description
4692565	6005-	TIE023:6005:S010030 Soil Sample
4692566	6020-	TIE023:6020:S010030 Soil Sample
4692567	6014-	TIE023:6014:S010030 Soil Sample
4692568	6007-	TIE023:6007:S010030 Soil Sample
4692569	6024-	TIE023:6024:S010030 Soil Sample
4692570	6028-	TIE023:6028:S010050 Soil Sample
4692571	6008-	TIE023:6008:S005020 Soil Sample
4692572	6010-	TIE023:6010:S005025 Soil Sample
4693387	EB1J-	TIE023:EB1:W012006 Grab Water Sample

CHAIN OF CUSTODY RECORD 7t-525767h, 192516 000

PAGE ___ OF__

NO. 7959

ociates, inc.

Mason, OH 45040 Soon, OH 44139 Phone: (613)459-9677 Phone: (440)519-2555 Fax: (513)459-9869 Fax: (440)519-2560 Dublin, OH 43016 Phone: (614)793-8777 Fax: (614)793-9070 6397 Emerald Parkway

CMasson, OH Solon, OH 4900 Patkway Dr. S181 Cochran Road Suits 100 Suits A

C Tolesdo, OH 3401 Glendale Ave. Sulte 300 Toledo, OH 43614 55 Phone: (419)385-218 Fax: (419)385-5487

ANALYSES PRESERVATIVES

COMMENTS A. Dool snix, 44 éng. C. F. B. B. Nixog pixt C. C. Hgéby, pixt C. D. Nixog pixt C. Dixog pixt C. Di 111/06 16.20 COLLECTION AWPLETPRES
A-AIR
C-ASSESTION
D-SEDWENT
P-PRODUCT
C-PRODUCT
P-PRODUCT
C-PRODUCT
C-PRODU METALS 8 Q 25 X : \$010030 SAMPLE TYPE & ID Soumans DEACH Phase: Samplers: M. TENNU SX Project #. TIE 033 TAILTESTILLE SAMPLE 5007: REPORT TO BLL iERRA Tie oa3 PROJECT NO. Clent 1

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1/19/06/11:55

9820 3 2000 Method of Delivery: FGD 16X Deliver To: LANCASTER Airbill Number: 8543 ij Š DATE TIME RECEIVED BY: RECEIVED BY ~ βEiγ TIME DATE M. TELLINGEN

NOTES: DATE: 1-20-26 PECETAGE POR LAB BY: DATE: 1-20-26

DISTRIBUTION: LAB USE RAUGT BE RETURNED WITH REPORT) TIME YELLOW - LAB UBE PINK - RETAINED B 9 PATE HME ij P COOLER TEMPERATURE AS RECEINED: RELINQUISHED BY: RELINGUISHED BY: 直 2

TURN AROUND TIME: STANDARD DAYS

- RETAINED BY HULL



Receipt Documentation Log

Client/Project: \\ \(\frac{1}{1} \)	2 Solutions	Shipping Container Sealed: Y N				
Date of Receipt:	20-06 In	Custody Seal Present: Y (N)				
Time of Receipt:	0900	Custody Seal Intact: Y / N / NA				
Source Code:	20-1	Package Ch	hilled Not Chilled			
		Unpacker Emp	. No.: 1255			
	Temperature of Sh	ipping Containe	rs			
. #1			#2			
Thermometer ID:	559	Thermometer	ID:			
Temp.:	6-0	Temp.:				
Temp Bottle (Surface Temp)	í	/ Surface Temp.			
Wet Ice / Dry Ice / Ice Packs		Wet Ice / Dry	Ice / Ice Packs			
Ice Present? Y N	Loose (Bagged)	Ice Present?	Y / N Loose Bagged			
#3			#4			
Thermometer ID:		Thermometer ID:				
Temp.:		Temp.:				
Temp. Bottle / Surface Temp	0.	Temp. Bottle / Surface Femp.				
Wet Ice / Dry Ice / Ice Pack	s	Wet Ice / Dry Ice / Ice Packs				
Ice Present? Y / N	Loose / Bagged	Lce Present?	Y / N Loose / Basged			
Paperwork Discrepancy/Unpa	acking Problems: Tie	023-60	05-5010030 (i) Encre ID Intoelmissing)			
	Ti	e 023-6	008-5005020 fre coined3			
			git Ib			
	, <u> </u>	Sin	(Abels)			
	Sample Administration Int	emal Chain of (Coron			
Name	Date	Time	Reason for Transfer			
Katla Bink Oca	1-2006	1030	Unpacking / Storage			
Da Weslund	1/20/06	1115	Place in Storage or (Entry)			
			Remove from Storage			
		8 :	Place in Storage or Entry			
			Entry			
			9803			

TR Submitted 433100 COMMENTS PAGE L GL 783 tidy ou NO. 7960 ANALYSES TURN AROUND TIME: SHALLOARD DAYS £ 1€ १९०९ 022527/02254 Method of Delivery: FED - EX S Now Trong L868734 | 4693387 Deliver To: LANCASTER 8543 Airbill Number: NOTES X **CHAIN OF CUSTODY RECORD** PRESERVATIVES × × - LAS USE (MUST BE RETURNED WITH REPORT) DATE: 1/21/06 050 CToledo, OH 3401 Glendale Ave. Suite 300 Toledo, OH 43614 55 Phone: (419)385-5487 1/20/00/14:00 COLLECTION TIME . E DATE Ę - RETAINED BY HULL A.-AIR C.-ABGESTOR C.-ABGESTOR C.-BEDINENT P. GROUNDINSTER P. PRODUCT P. BOOL P. WITSE Z. OTHERS Solon, OH 44139 Phone: (440)518-2555 Fax: (440)518-2560 -LAB USE Solon, OH 8161 Cochran Road METALS WHITE YELLOW PINK RECEIVED BY: NO. OF RECEINED BY 5 M. TENNY SOL Li Mason, OH 4900 Parkway Dr. Sufe 100 50 Mason, OH 45-0407 8 Phore: (513)459-9889 Fax: (513)459-9889 DATE: /-20-06 300% I OM: SAMPLE TYPE & ID ပ ING Undlanapolls. IN C18 6330 E. 75th St. 6330 E. 75th St. 65 Sults 174 184550 Indianapolis. IN 46250 F Fext (317)558-0553 F Phase: BEACH TIME ij. 3,5 DATE Samplers: - M. S. C.C. ssociates, inc. Client: TIERRA SOL.
Site: PAINESVICLE SAMPLE LOCATION REPORT TO: BLL Project #. Tie 033 COOLER TEMPERATURE Dublin, OH 43016 Phone: (614)793-8777 Fax: (614)793-9070 EB 1 CDubiln. OH C397 Emerald Parkway AS RECEIVED: RELINGIASHED BY RELINQUISHED BY: INQUISHED BY: PROJECT Tie Das 90 4°



Environmental Sample Administration Receipt Documentation Log

Client/Project: Tierra	Solutions Inc	Shipping Co	ntainer Sealed Y / N			
Date of Receipt:	·	Custody Seal Present: Y/ N				
Time of Receipt:		Custody Seal Intact. Y / N / NA				
Source Code:50~/		Package: Cl	hilled Not Chilled			
		<u>_</u>	. No.: 169C			
	Temperature of Sh	nipping Containe	rs			
#1			#2			
Thermometer ID: 429983	3	Thermometer	ID:			
Tama: 250						
Temp. Bottle / Surface Temp.			/ Surface Temp.			
Wet loe / Dry Ice / Ice Packs		Wet Ice / Dry	Ice / Ice Packs			
Ice Present? (Y) N	Loose (Bagged)	Ice Present?	\			
#3			#4			
Thermometer ID:		Thermometer ID:				
Temp.:		Temp.:				
Temp. Bottle / Surface Temp.		Temp. Bottle / Surface Temp.				
Wet Ice / Dry Ice / Ice Packs		Wet Ice / Dry Ice / Ice Packs				
Ice Present? Y / N	Loose / Bagged	Ice Present?	Y / N Loose / Bagged			
Paperwork Discrepancy/Unpac	king Problems:	eceived a	5 trip blanks			
Sa	mple Administration In	temal Chain of (Custody			
Name	Date	Time	Reason for Transfer			
Jayson I bach	1/21/06	1045	Unpacking D /2655			
Um	1/21/06	1133	Place in Storage or Entry			
/		<u> </u>	Remove from Storage			
		4.	Place in Storage or Entry			
			Entry REARS			

Chain-of-Custody Record



Client/Project: Tierra Solutions, Inc - Painesville, OH

Preservative:

None

Matrix:

Soil

SDG:

PNV88

Sample # Range of Entry Group: 4692565-72

Bottle Type: (96) 500ml glass

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
4692565-72	208 Sa Nesbur	SA Hold Storage	1/20/06	1120	Entry to Storage	
469285-22	Storage	SF Ceish	1-20-06	1340	Homos + Jib	
4692565-72	SFreish 1201	J	1-20-04	1435	Storage	
465,2565-72	Man Storage	1842 J.Bowlls	1-20-010	1537	EANNILLENE THEK	,
4652565-72	Man Stolage 1292 S. Boxels	Main Storage	1-20-06	1549	Effectivence their	
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Pg.1-62

Secure Storage Chain of Custody Subsample

Client/Project: Tierra Solutions, Inc	-Painesville Ott
Preservative: NONE	Matrix: Soi(
Sample # Range for Entry Group: 4692565-72	Bottle Type (21) 1000m 1 91955
SDG: PNV88	Composite (20) Soconi glass
Cample	Dist., Extr.,

		_			(0)	4/1-10-1
Sample Number(s) in	Released	Received	Date of	Time of	Reason for Change of	Dist., Extr., or Digest Chain
Custody	Ву	By	Transfer	Transfer	Custody	Created (X)
4692565-22	Strestan 1201	Your Storage	1-20-06	1435	Storage	
4692565-72	Mary Stellinge	MM1424	1-23-06	5:30	715 Semi Sol Sommatron	
4697565-72	MM1474	Main Sturage,	1-23-06	6:00	storage	
4692565-72	Main storage	8my 1234	1/23/06	i } 00	PH	
4692565-72	Imy 1234	Main Storage	1/23/06	1900	storage.	
4692865-72	train Storigi	JFreister 1201	1-24-04	1715	Moist	
4692565-72	lifteighen 1201	storge	1-24-06	1734	Storag	
4692865-72	main storage	Dants. S. I	1-24-06	2135	crite digest	λ
4692565-72	Daniel S.S.th	main Storage	1-25-06	0235	storage	
469 2565-12	Main Storage	Mariatier 1313	1-25-06	0600	CLP Pest Extraction	. 🗶
4692565-72	Dantier 1313	Main Storage	1-25-06	0610	Storage	
469.2565-72	Storage	CyTian 1242	01-25-06	10:45	CNIPP	X
4692565-72	C471242	Man 3) orașe	01-25-16	12:15	Storage	
4692565-72	shain Storage	Daniel S. S. It	1-25-04	2100	cr digert	
4692565-72	Daniel S. Il	min Storze	1-26-04	0330	Stored	
4692565-72	mails Storage	Mecidia 1026	1-30-cu	0730	URP TSSZ	
4 6 92565-72	main-	Moch Starage	1-30-00	0745	Strage	6688



Client/Project:	TIEKAA (>06 mmon>-	PAINESV.	ILLE 04		•
Preservative:	NUNE	Matrix:	Soil	SDG: _	PNUSS	
Sample # Rang	e of Entry Group:	4692565-	72	Bottle Ty	rpe: 20 (500 ml	glas

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
4092525-72	MAIN (STERAGE	J8Mothst	2-1-06	0730	TOC Analysis STORAGE	
4692525-72	STERAGE JEMAHLUT 495	MAIN SPRAGE	2-1-06	0100	STORAGE	
\$ My 1						
		,				
	,		_			
					·	
	·					
						8869



Client/Project: Tierra Solutions, Inc - Painesville, OH

Preservative:

None

Matrix:

WW

SDG:

PNV60

Sample # Range of Entry Group: 4693387

Bottle Type: (04) 500 ml plastic

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
4693387	(964)	Danil 55.7	1/21/06	1140	Cr ⁴⁶	
4693387	and 5.5.I	Dept-29 Storze	1-21-04	1245	Storage	
4693387	Dept 29 Storage		1/21/06	2/45	PH	
4693387	N.Rohrer 1223	Main Storage	1/22/06	0145	storage	
UL93387	neuh Storage	mteddig 100.2	1-250c	nw	ORP	
4693387	1501 1501	main Storage	1-25-06	1345	Storage	
-					.5	

SHIN



Client/Project: Tierra Solutions, Inc – Painesville, OH

(SN 1/24/06

Preservative:

HCI

Matrix:

SDG:

PNV60 88

ome 1/20/26 Sample # Range of Entry Group: 4693387 ,470

Bottle Type: (06) 1000 ml amber glass

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
4693387	OGw (961)	SA Hold Storage	1/21/06	<i>1</i> 370	Entry to Storage	
4693387	SELOCE E	Jararoz	104.00p	09LLS	Andreak	
4693387	301/01/03 3.1388	main	1.24.06	∞(50 <u>)</u>	Trouge	
4693387	main storage	m Haiding	1-25-00	0700	Tout & Great	
164.3381 St.	which &	storage	+2700 +2500	073O	Storage mu	102× 1-25-60
4693387	m12eidig	main Starage	1-77-06	1400	Storage	
		,				
			_			
				·		
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Where quality is a science.

METHODOLOGY SUMMARY/REFERENCE

5892 Hexavalent Chromium by IC (solids)

A measured volume of sample is introduced into the ion chromatograph using a well buffered ammonium sulfate, ammonium hydroxide eluent. A guard column removes organics from the sample before hex chrome is separated on an anion exchange separator column. Postcolumn derivatization of the Cr(VI) with diphenylcarbohydrazide is followed by detection of the colored complex at 530 nm.

Reference: Test Methods for Evaluating Solid Waste, SW-846, Method 7199, December 1996

0383 TOC by Lloyd Kahn Method

Total organic carbon is determined by acidifying a sample aliquot and heating it to remove any inorganic carbon. The sample is then heated to 900°C for combustion of the remaining organic carbon. The resulting carbon dioxide from the organic carbon is detected by a nondispersive infrared detector that has been calibrated to directly display the mass of carbon dioxide detected. The mass is proportional to the mass of total organic carbon in the sample.

Reference: Lloyd Kahn Modified

0276 Hexavalent Chromium (water)

Hexavalent chromium is determined colorimetrically using diphenylcarbazide. The absorbance is read at 540 nm and compared to a standard curve.

Reference: Test Methods for Evaluating Solid Waste SW-846, Method 7196A, July 1992

7825 Hexavalent Chromium (Extraction)

The sample is digested using a hot 3% sodium carbonate, 2% sodium hydroxide solution and then filtered through a 0.45 micron filter. The digestates are then ready for color development by analysis #0425.

Reference: Test Methods for Evaluating Solid Waste, SW-846, Method 3060A

Where quality is a science.

7552 ORP Observed

The oxidation-reduction potential is measured using a platinum electrode. The potential recorded is the electromotive force observed between the noble electrode and a reference electrode.

Reference: Annual Book of ASTM Standards, 1985, Method D-1498

1126 Total Petroleum Hydrocarbons, 8124 TPH IR (W) Prep

The sample is extracted with trichlorotrifluoroethane in a separatory funnel. Silica gel is added. Petroleum hydrocarbons in the extract are quantitatively measured by an infrared spectrophotometer.

Reference: Methods for Chemical Analysis of Water and Wastes USEPA 600/4-79-020, Method 418.1

0200 pH (water)

The activity of hydrogen ions in the sample is measured using a glass electrode and a reference electrode.

l

Reference: Methods for Chemical Analysis of Water and Wastes, USEPA 600/4-79-020, Method 150.1

1441 pH (solid)

A 1:1 slurry (50 g sample and 50 ml deionized water) is tumbled for 1 hour. The activity of hydrogen ions in the supernatant is measured using a glass electrode and a reference electrode.

Reference: USEPA Contract Laboratory Program
Statement of Work for Organic Analysis, Multimedia
Multiconcentration Document, OLMO4.3

1353 Moisture (solid)

A well mixed sample is placed in a tared container and dried to constant weight in an oven at 103-105C. The decrease in weight is the total moisture.

6613

Reference: USEPA Contract Laboratory Program

Statement of Work for Organic Analysis, Multimedia

Multiconcentration Document, OLMO3.2



ANALYTICAL RESULTS

Prepared for:

Tierra Solutions, Inc. PO Box 1487 Painesville OH 44077

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 975061. Samples arrived at the laboratory on Friday, January 20, 2006. The PO# for this group is RIANAL01.

Client Description	Lancaster Labs Number
TIE023:6005:S010030 Soil Sample	4692565
TIE023:6020:S010030 Soil Sample	4692566
TIE023:6014:S010030 Soil Sample	4692567
TIE023:6007:S010030 Soil Sample	4692568
TIE023:6024:S010030 Soil Sample	4692569
TIE023:6028:S010050 Soil Sample	4692570
TIE023:6008:S005020 Soil Sample	4692571
TIE023:6010:S005025 Soil Sample	4692572

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO	Tierra Solutions, Inc.	Attn: Paul Dugas
1 COPY TO	Hull & Associates, Inc.	Attn: Bill Beach
1 COPY TO	Data Package Group	





Questions? Contact your Client Services Representative Wendy A Kozma at (717) 656-2300

Respectfully Submitted,

Max E. Snavely

Senior Specialist





Page 1 of 12

Lancaster Laboratories Sample No. SW 4692565

TIE023:6005:S010030 Soil Sample

Painesville, OH

Collected: 01/19/2006 13:40 by MT Account Number: 06101

Submitted: 01/20/2006 09:00 Tierra Solutions, Inc.

Reported: 02/16/2006 at 00:54 PO Box 1487

Discard: 03/03/2006 Painesville OH 44077

6005- SDG#: PNV88-01

				pry		
CAT			Dry	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00383	TOC by Lloyd Kahn	n.a.	N.D.	210.	mg/kg	1
	The quantitation limit for TO matrix.	C was increased	due to the na	ture of the sample		
01353	Moisture	n.a.	12.0	0.50	8	1
01441	рн	n.a.	7.47	0.0100	Std. Units	1
	The pH of the method blank (b	ackground soil)	analyzed with	the sample was 7.0	16.	
	The pH was performed on a 1:1					
	of deionized water) after bei					
05892	Hexavalent Chromium by IC	18540-29-9	N.D.	0.23	mg/kg	1
07552	ORP Observed	n.a.	124.	1.0	νm	1
	The ORP reported is the obser during the analysis.	ved potential o	f the platinum	n electrode used		

07157 OLM03.2 Volatiles in Soils

A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

07125 SVOA Library Search OLM03.2

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form. An "X" indicates an isomer of the listed compound.

07126 VOA Library - Search OLM03.2

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.





Page 2 of 12

Lancaster Laboratories Sample No. SW 4692565

TIE023:6005:S010030 Soil Sample

Painesville, OH

Collected:01/19/2006 13:40

by MT

Account Number: 06101

Submitted: 01/20/2006 09:00

Reported: 02/16/2006 at 00:54

Discard: 03/03/2006

Tierra Solutions, Inc.

PO Box 1487

Painesville OH 44077

6005- SDG#: PNV88-01

Laboratory Chronicle

		Laboratory	Chro	nicle		
CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00159	Mercury	SOW ILM04.0	1	01/30/2006 12:01	Damary Valentin	1
01643	Aluminum	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
01650	Calcium	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
01654	Iron	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
01657	Magnesium	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
01662	Potassium	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
01667	Sodium	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
06925	Thallium	SOW ILM04.0	2	02/08/2006 12:52	Joanne M Gates	1
06935	Arsenic	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
06936	Selenium	SOW ILM04.0	2	02/08/2006 12:52	Joanne M Gates	1
06944	Antimony	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
06946	Barium	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
06947	Beryllium	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
06949	Cadmium	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
06951	Chromium	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
06952	Cobalt	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
06953	Copper	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
06955	Lead	SOW ILM04.0	2	02/08/2006 12:52	Joanne M Gates	1
06958	Manganese	SOW ILM04.0	1	01/31/2006 08:06	Joanne M Gates	1
06961	Nickel	SOW ILMO4.0	1	01/31/2006 08:06	Joanne M Gates	1
06966	Silver	SOW ILMO4.0	1	01/31/2006 08:06	Joanne M Gates	1
06971	Vanadium	SOW ILMO4.0	1	01/31/2006 08:06	Joanne M Gates	1
06972	Zinc	SOW ILMO4.0	1	01/31/2006 08:06	Joanne M Gates	1
00383	TOC by Lloyd Kahn	Lloyd Kahn modified	1	02/02/2006 10:55	James S Mathiot	1
01353	Moisture	SOW OLM03.2	1	01/24/2006 16:56	Scott W Freisher	1
01441	нα	SOW OLM04.3	1	01/24/2006 18:30	Luz M Groff	1
05892	Hexavalent Chromium by IC	SW-846 7199	1	01/25/2006 10:44	William L Hamaker Jr	
05910	Total Cyanide CLP (solid)	SOW ILM04.0	1	01/27/2006 17:33	Venia B McFadden	1
07552	ORP Observed	ASTM D1498	1	01/30/2006 08:30	Michelle L Heidig	1
04562	OLM03.2	SOW OLM03.2	1	01/31/2006 16:31	Richard A Shober	1
	Pesticides/PCBs/Soil					
04438	OLM03.2 Semivolatiles/Soil	SOW OLM03.2	1	02/06/2006 23:00	Linda M Hartenstine	1
07157	OLM03.2 Volatiles in Soils	SOW OLM03.2	1	01/26/2006 19:07	Jason M Long	0.81
00494	SW CLP Hg Digest	SOW ILM04.0	1	01/29/2006 23:15	Annamaria Stipkovits	
01849	SW CLP ICP Digest	SOW ILM04.0	1	01/29/2006 20:50	Annamaria Stipkovits	
04185	CLP Soil Extraction	SOW OLM03.2	1	01/25/2006 07:00	Danette S Cavalier	1
04607	CLP Soil Extraction	SOW OLM03.2	1	01/23/2006 05:00	Mark P Mastropietro	1
05909	CLP Cyanide Solid Distillation	SOW ILM04.0	1	01/25/2006 11:40	Choon Y Tian	1
07578	GC/MS-HL Encore Prep-NC	sw-846 5035	1	01/20/2006 16:00	Justin M Bowers	n.a.
07578	Hexavalent Cr (Extraction)	SW-846 3060A	1	01/24/2006 22:15	Daniel S Smith	1
0/020	nexavatent of (Extraction)	040 2000A	_	01,24,2000 22.10		_



Page 3 of 12

Lancaster Laboratories Sample No. SW 4692565

TIE023:6005:S010030 Soil Sample

Painesville, OH

Collected:01/19/2006 13:40

by MT

Account Number: 06101

Submitted: 01/20/2006 09:00

Reported: 02/16/2006 at 00:54

Discard: 03/03/2006

Tierra Solutions, Inc.

PO Box 1487

Painesville OH 44077

SDG#: PNV88-01 6005-

08389 GC/MS - LL Encore Prep SW-846 5035 08389 GC/MS - LL Encore Prep SW-846 5035

2 01/20/2006 16:09 Justin M Bowers

1 01/20/2006 16:08 Justin M Bowers

n.a. n.a.





Page 4 of 12

		ţ	JSEPA - CLP					
			1			EPA	SAMPLE NO.	
		INORGANIC	ANALYSIS DATA	SE	HEET	.—		
						1	6005-	i
						1	0005	•
ab Name: LAN	CASTER LABOR	ATORIES	Contract:					
ab Code:		lo.:	SAS No.:				No.: PNV88	
atrix (so il/	water): SOIL		_				D: 4692565	
evel (low/me	d): LOW			Ι	ate Re	ceive	d: 01/20/06	
Solids:	88.0							
С	oncentration	Units (ug.	/L or mg/kg dry	, ,	veight)	: MG/	KG	
				1 1		- ,		
	CAS No.	l L Analuta	 Concentration	ו ו ורו	Q	M		
	CAS NO.	l Whathce				i i		
	7429-90-5	Aluminum				P		
	7440-36-0		1.7	ן טו	N	P_		
	7440-38-2	· -		ا_ا	N	P_		
	7440-39-3	Barium	84.8			P_		
	1_7440-41-7_	Beryllium				P_		
	1_7440-43-9_		J0.15			P_		
	1_7440-70-2_		32200			P_		
	1_7440-47-3_	_		_		P_		
	1_7440-48-4_		13.1			P_l		
	1_7440-50-8_	·	26.9 29400			P_ P		
	1_7439-89-6_		15.5			F		
	1_7439-92-1_ 1_7439-95-4_			-		P		
	1 7439-96-5			_		P		
	7439-97-6	-	· — —			CVI		
	7440-02-0					P		
	7440-09-7			<u> </u>	I	P_		
	7782-49-2			ĮŪ	l	P_		
	7440-22-4	Silver	0.48	ΙB	!	P_		
	7440-23-5		1175			P_		
	7440-28-0			_		P_		
	1_7440-62-2_					IP_		
	7440-66-6		72.2			P_		
	! ⁵⁷⁻¹²⁻⁵ -	[Cyanide				CA		
olor Before:	DDOM.	Clari	l ty Before:	'-	'	Tex	ture: MEDIUN	1
olor Belore: olor After:			ty After:				ifacts:	
omments:	10000	CIULI	-,				· -	
OMMICHED.								
-								
		<u></u>			-		T 7 340 4	Λ.
			FORM I - IN				ILMO4	. 0





Page 5 of 12

1A VOLATILE ORGANICS ANALYSIS DATA SH		A SAMPLE NO.
	!	6005-
Lab Name: Lancaster Laboratories Contract		
Lab Code: LANCAS Case No.: SAS No.		NO.:
Level: (low/med) LOW Moisture: not dec. 12 GC Column: DB-624 ID: 0.25 (mm) Soil Extract Volume: (uL) CONCENTRA	HP07566.i/06jan ed: 01/20/06 ed: 01/26/06 etor: 1.0	-
! 74-87-3Chloromethane	! 2	! U !
! 75-01-4Vinyl Chloride	! 2	! U !
! 74-83-9Bromomethane	! 3	! ប !
! 75-00-3Chloroethane	! 3	! U !
! 75-35-41,1-Dichloroethene	! 2	! U !
! 67-64-1Acetone	! 10	1 !
! 75-15-0Carbon Disulfide	! 4	! J !
! 75-09-2Methylene Chloride	! 2	! U !
! 75-34-31,1-Dichloroethane	! 0.9	! U !
! 540-59-01,2-Dichloroethene (Total)	! 2	! U !
! 78-93-32-Butanone		! ប !
! 67-66-3Chloroform	! 0.9	! U !
! 71-55-61,1,1-Trichloroethane	! 0.9	! U !
! 56-23-5Carbon Tetrachloride	. 0.9	
! 71-43-2Benzene	! 2	! J !
! 107-06-21,2-Dichloroethane	. 2	! U !
! 79-01-6Trichloroethene	. 0.9	
! 78-87-51,2-Dichloropropane	! 3	! U !
! 75-27-4Bromodichloromethane	. 2	! U !
! 10061-01-5cis-1,3-Dichloropropene	. 0.9	
! 108-10-14-Methyl-2-Pentanone	. 3	. U !
! 108-88-3Toluene	! 4	. J !
! 10061-02-6trans-1,3-Dichloropropene	. 0.9	
! 79-00-51,1,2-Trichloroethane	! 0.9	! U !
! 127-18-4Tetrachloroethene	! 0.9	! ប !
! 591-78-62-Hexanone	! 3	! U !
! 124-48-1Dibromochloromethane	. 0.9	
! 108-90-7Chlorobenzene	! 0.9	
! 100-41-4Ethylbenzene	! 0.9	! U !
! 1330-20-7Xylene (Total)	. 0.9	. U :
: 1930-50-1	. 2	
nage 1 of 2		-··
page 1 of 2 FORM I VOA		OLM03.0



Analysis Report



Page 6 of 12

1A VOLATILE ORGANICS ANALYSIS DATA SHEET	EPA SAMPLE NO.
VOLKTILE ONORHICS ANABISTS BATA SHEET	1
	! 6005 !
Lab Name: Lancaster Laboratories Contract:	1 1
Lab Code: LANCAS Case No.: SAS No.:	SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 469	2565
	66.i/06jan26b.b/rj26s01.d
Level: (low/med) LOW Date Received: 01/	20/06
Moisture: not dec. 12 Date Analyzed: 01/	26/06
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1	.0
Soil Extract Volume: (uL) Soil Aliquot Volum CONCENTRATION U	
CAS NO. COMPOUND (ug/L or ug/Kg) M	DL ug/Kg Q
! 100-42-5Styrene !	0.9 ! U !
! 75-25-2Bromoform !	0.9 ! U !
! 79-34-51,1,2,2-Tetrachloroethane !	0.9 ! U !
!!	!!
page 2 of 2	 -
FORM I VOA	OLM03.0





Page 7 of 12

1B	EPA SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET	
	1
	! 6005- !
Lab Name: Lancaster Laboratories Contract:	<u></u> !
Lab Code: LANCAS Case No.: SAS No.:	SDG No.:
	mple ID: 4692565
Maciin. (Boil) Macol, Doll	le ID: hb062.d
Dampie #c/ voi: 30 (3/)	eceived: 01/20/06
reset: (tow/med) now	xtracted: 01/23/06
5 MOISCUIC. NOC acc. IL acc.	nalyzed: 02/06/06
Concentrated Entrates	on Factor: 1.0
111/2001011 10141101 = 11	ction: Sonc
CONCENTRATION UNIT	5:
CAS NO. COMPOUND (ug/L or ug/Kg) ME	L UG/KG Q
! 108-95-2 Phenol !	38 ! U !
! 111-44-4 bis(2-Chloroethyl)ether!	38 ! U !
! 95-57-8 2-Chlorophenol!	38 ! U !
! 541-73-1 1,3-Dichlorobenzene!	38 ! U !
! 106-46-7 1,4-Dichlorobenzene	38 ! U !
95-50-1 1,2-Dichlorobenzene	38 ! U !
95-48-7 2-Methylphenol	38 ! U !
! 108-60-1 2,2'-oxybis(1-Chloropropane)!	38 ! U !
! 106-44-5 4-Methylphenol	38 ! U !
! 621-64-7 N-Nitroso-di-n-propylamine	38 ! U !
! 67-72-1 Hexachloroethane	38 ! U !
98-95-3 Nitrobenzene	38 ! U !
! 78-59-1 Isophorone	38 ! U !
! 88-75-5 2-Nitrophenol	38 ! U !
! 105-67-9 2,4-Dimethylphenol	76 ! U !
! 111-91-1 bis(2-Chloroethoxy)methane	38 ! U !
! 120-83-2 2,4-Dichlorophenol	38 ! U !
! 120-83-2 2,4-Bichiorophenor ! 120-82-1 1,2,4-Trichlorobenzene	38 ! U !
1 120-82-1 1,2,4-ilicatorobenzenc	38 ! Ū !
! 91-20-3 Naphthalene ! 106-47-8 4-Chloroaniline	150 ! U !
i 106-4/-8 4-Chiofodhiine	38 ! U !
! 87-68-3 Hexachlorobutadiene	38 ! U !
! 59-50-7 4-Chloro-3-methylphenol	38 ! ប !
! 91-57-6 2-Methylnaphthalene	76 ! U !
! 77-47-4 Hexachlorocyclopentadiene	38 ! U !
! 88-06-2 2,4,6-Trichlorophenol	: 38 : U :
95-95-4 2,4,5-Trichlorophenol	: 38 : U : : 38 ! U !
! 91-58-7 2-Chloronaphthalene	
! 88-74-4 2-Nitroaniline	
! 131-11-3 Dimethylphthalate	38 ! U !
! 606-20-2 2,6-Dinitrotoluene	. 38 ! U !
!	!!!
FORM I SV-1	OLM03.0

8822





Page 8 of 12

		С			PA	SAMP	LE NO.
SEMIVOLA'	TILE ORGANICS	ANALYSIS DATA	A SHEET				 ,
				!			!
				!		05-	!
Lab Name: Lancaster La	aboratories	Contrac	ct:	!_			
Lab Code: LANCAS			o.:		No	· · :	
Matrix: (soil/water)			Lab Sa			2565	
	(g/mL) G		Lab Fi	le ID: hb	062	d:	
Level: (low/med) LOW			Date R	eceived:		/20/	
% Moisture: not dec:	12 dec:		Date E	xtracted:	01	/23/	06
Concentrated Extract		(1117.)	Date A	nalyzed:	02	2/06/	06
Injection Volume: 2		(55)	Diluti	on Factor:	3	0	
				ction: Son			
GPC Cleanup: (Y/N) Y	pH:	CONCENTRATI					
G2.0 ***	COMPOUND	(ug/L or ug				Q	
CAS NO.	COMPOUND	(ug/L or ug	/kg) mb	11 00/10		¥	
	7			38		U	- _!
! 208-96-8 -				76	-	-	i
! 99-09-2			:	38		U	1
! 83-32-9			:			-	;
! 51-28-5 	- 2,4-Dinitro	phenol		190			:
! 100-02-7	 4-Nitropher 	101	!		!		
! 132-64-9 	 Dibenzofura 	ın	!		!		!
! 121-14-2	- 2,4-Dinitro	toluene	!		!		!
! 84-66-2 -	- Diethylphth	nalate	!		!		Ī
! 7005-72-3	- 4-Chlorophe	nyl-phenyleth	er!		į		!
! 86-73-7	- Fluorene		!	38	į	U	į
! 100-01-6	- 4-Nitroanil	line	!	76	!	Ū	1
! 534-52-1	- 4.6-Dinitro	-2-methylphen	ol!	38	!	U	!
! 86-30-6 -			!	38	!	υ	ţ
! 101-55-3	- 4-Bromopher	vl-phenvlethe	r !	38	!	U	!
! 118-74-1				. 38	į	U	1
! 87-86-5				190	1	U	į.
! 85-01-8- 				38	į	υ	!
! 120+12-7- 				38	. !	U	!
! 120+12-7 ! 86-74-8	- Anthracene			38	!	U	!
! 86-74-8	- Carbazore_	hthalata			!		1
! 84-74-2				38		Ü	1
! 206-44-0		1e			1		į
! 129-00-0		1 m h 4 h a 1 a 4 a		38		Ü	i
! 85-68-7					!		1
91-94-1				1 38		บ	I
! 56-55-3 	- Benzo(a)an	cnracene	. .		:	-	: }
! 117-81-7	- bis(2-Ethy)	inexyi)phthala	те		! !		:
! 218-01-9	Chrysene	 					:
! 117-84-0	- Di-n-octyl	phthalate		! 38	-	Ü	!
! 205-99-2	Benzo(b)fl	uoranthene		! 38		U	!
! 207-08-9- 	- Benzo(k)fl	uoranthene		! 38		υ	!
1				!	!		!

0023

OLM03.0



FORM I SV-2

Analysis Report



Page 9 of 12

SEMIVOLATILE ORGANICS	C cont ANALYSIS DATA	A SHEET	E !		IPLE NO.
Lab Name: Lancaster Laboratories Lab Code: LANCAS Case No.:_ Matrix: (soil/water) SOIL Sample wt/vol: 30 (g/mL) G Level: (low/med) LOW % Moisture: not dec: 12 dec:			le ID: ID: hb eived:	01/20	55
Concentrated Extract Volume: 500 Injection Volume: 2 (uL) GPC Cleanup: (Y/N) Y pH:	(uL) CONCENTRATIO	Date Ana Dilution Extract ON UNITS:	lyzed: Factor: ion: Son	02/06 1.0 c	706
CAS NO. COMPOUND ! 50-32-8 Benzo(a)py: ! 193-39-5 Indeno(1,2, ! 53-70-3 Dibenz(a,h) ! 191-24-2 Benzo(g,h,:	,3-cd)pyrene)anthracene	/Kg) MDL	38 38 38 38	! U ! U ! U ! U	! ! ! !
FORM I	sv-3				OLM03.0





Page 10 of 12

OPCANICS	1D ANALYSIS DATA SHEET	EPA SAMPLE NO.
ONGAMICS	AMABIOTO DATA DIRECT	
Lab Name:Lancaster Laboratories	Contract:	6005- !
Lab Code: Case No.:		: PNV88
Matrix: (soil/water) SOIL	Lab Sample ID: 4	
Sample wt/vol: 30 (g/mL)	g Lab File ID: 4D13	353.52R
% Moisture: 12 decanted: (Y	/N)N Date Received: ()1/20/06
Extraction: (SepF/Cont/Sonc)	SONC Date Extracted: ()1/25/06
Concentrated Extract Volume:	10000 (uL) Date Analyzed: (01/31/06
Injection Volume: 1 (uL)	Dilution Factor:	1
GPC Cleanup: (Y/N) Y pH:	8 Sulfur Cleanup:	(Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND	(ug/L or ug/Kg) MDL ug/kg C	Ş
------------------	-------------------------------	---

			_
ţ.		! !	į
!	319-84-6alpha-BHC	_! 0.19!U	!
!	58-89-9gamma-BHC (Lindane)	_! 0.19!U	į
ļ	319-85-7beta-BHC	_! 0.19!U	!
!	319-86-8delta-BHC	_! 0.19!U	!
ţ	76-44-8Heptachlor	_! 0.19!ប	!
ļ	309-00-2Aldrin	_! 0.19!ប	!
!	1024-57-3Heptachlor epoxide	! 0.19!U	į
!	5103-74-2qamma-Chlordane	! 0.20!JP	!
:	5103-71-9alpha-Chlordane	! 0.19!U	2
ļ	72-55-94,4'-DDE	! 0.38!U	!
!	959-98-8Endosulfan I	_! 0.19!U	1
!	60-57-1Dieldrin	. 0.38!U	!
1	72-20-8Endrin	. 0.38!U	!
į	72-54-84,4'-DDD	. 0.50!U	ļ.
į	33213-65-9Endosulfan II	! 0.38!U	ļ
1	50-29-34,4'-DDT	1 0.38!U	ļ
į	7421-93-4Endrin aldehyde	! 0.76! U	!
	72-43-5Methoxychlor	_! 2.3! U	!
ţ	1031-07-8Endosulfan sulfate	_! 0.38!U	į
ţ	53494-70-5Endrin ketone	_! 0.38! u	į
!	12674-11-2Aroclor-1016	_! 17!ប	ţ
•	11104-28-2Aroclor-1221	_! 19!U	!
1	11141-16-5Aroclor-1232	_! 30!U	!
1	53469-21-9Aroclor-1242	. 9.9!u	!
1	12672-29-6Aroclor-1248	_! 28!U	!
1	11097-69-1Aroclor-1254	_! 10!U	Į.
į	11096-82-5Aroclor-1260	_i 9.1!U	!
į	8001-35-2Toxaphene	_! 22!U	!
į	<u> </u>	i	!

FORM I

OLM03.0





Page 11 of 12

EPA SAMPLE NO. VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS ! 6005-

CAS NUMBER	! COMPOUND NAME	! !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	EST. CONC.	! ! Q
	:=!===================================	!=======!		! =====
1.	! Unknown	! 2.34 !		! J
2.	! Unknown			! J
3.	!Unknown alkane			! J
4.	!Unknown alkane	! 4.40 !	24	! J
5. 96-14-0	!Pentane, 3-methy1-	! 4.79!	8	! NJ
6. 110-54-3	!Hexane	! 5.19 !	17	! NJ
7.	!Unknown alicyclic	! 6.11 !	8	! J
8.	!Unknown hydrocarbon	! 7.04 !	17	! J
9. 108-87-2	!Cyclohexane, methyl-	! 8.58 !	8	! NJ
10.	!Unknown siloxane	! 10.33 !	-	! J B
11.	!Unknown siloxane	! 12.34 !	16	! J B
12.	!Unknown siloxane	! 13.65 !	6	! J
13	!	!!		!
14.	!	! 1	_	!
15	!	! !		!
16.	1	1 1		!
17.	!	1 !		!
18	!	1 !		!
19.	ı	1 !		!
20.		!!		!
21.]	!!		!
22.	!	1 !		!
23.	.!	1		!
24	!	1		1
25.	!	!		!
26.	!	1!		!
27.	!	!!		!
28.		! ! !		!
29.	!	! <u></u> !		!
30		! !		!
	1	<u></u>		!

FORM I VOA-TIC

OLM03.0





Page 12 of 12

EPA SAMPLE NO. SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS 16005-Lab Name: Lancaster Laboratories Contract: !

Lab Code: LANCAS Case No.: SAS No.: SDG No.: SD

Number TICs found: 14 CONCENTRATION UI (ug/L or ug/Kg) ug/Kg

CAS NUMBER	, —					i			-,
1.	! CAS	NUMBER	! COMPOUND NAME	į	RT	!	EST. CONC.	Q	į
2.	! ====		= ==================================	•		•			==!
3. Unknown 21.967 100 J 4. Unknown 23.404 120 J 5. Unknown 24.980 80 J 6. Unknown 25.268 330 J 7. Unknown 28.505 96 J 8. Unknown 28.833 91 J 9. Unknown Carboxylic Acid 30.514 130 J 10. Unknown Carboxylic Acid 30.753 1800 J 11. Unknown 30.932 250 J 12. Unknown 32.485 1200 J 13. Unknown 32.485 1200 J 14. Unknown 48.162 250 J 15. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 100 J 100 J 100 J 100 J 100 J 100 J 110 J 120 J 130 J 140 J 150 J 150 J 150 J 150 J 150 J 150 J 170 J 180 J 190 J	! 1.		!Unknown	Ţ	18.017	!	190	J	!
4. Unknown	2.		!Unknown	Ţ	20.808	!	110	J	!
5. Unknown 24.980 80 J 6. Unknown 25.268 330 J 7. Unknown Carboxylic Acid 28.505 96 J 8. Unknown 28.833 91 J 9. Unknown Carboxylic Acid 30.514 130 J 10. Unknown Carboxylic Acid 30.753 1800 J 11. Unknown 30.932 250 J 12. Unknown 32.485 1200 J 13. Unknown 32.485 1200 J 14. Unknown 32.664 160 J 15. 16. 17. 18. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 20. 20. 21. 22.	3.		!Unknown	į	21.967	!	100	J	1
6. Unknown 25.268 330 J B 7. Unknown Carboxylic Acid 28.505 96 J 8. Unknown 28.833 91 J J 9. Unknown Carboxylic Acid 30.514 130 J 10. Unknown Carboxylic Acid 30.753 1800 J B 11. Unknown 30.932 250 J 12. Unknown 32.485 1200 J B 13. Unknown 32.485 1200 J B 13. Unknown 32.664 160 J 14. Unknown 48.162 250 J 15.	4		!Unknown	Į	23.404	!	120	J	!
7. Unknown Carboxylic Acid 28.505 96 J 8. Unknown 28.833 91 J J 9. Unknown Carboxylic Acid 30.514 130 J 10. Unknown Carboxylic Acid 30.753 1800 J B 11. Unknown 30.932 250 J 12. Unknown 32.485 1200 J B 13. Unknown 32.664 160 J 14. Unknown 32.664 160 J 14. Unknown 48.162 250 J 15.	5.		!Unknown	ţ	24.980	!	80	J	į
8	1 6.		!Unknown	ţ	25.268	!	330	JB	1
9. Unknown Carboxylic Acid 30.514 130 J 10. Unknown Carboxylic Acid 30.753 1800 J 11. Unknown 30.932 250 J 12. Unknown 32.485 1200 J 13. Unknown 32.664 160 J 14. Unknown 48.162 250 J 15.	7		!Unknown Carboxylic Acid	į	28.505	!	96	J	į
10. !Unknown Carboxylic Acid 30.753 1800 J B 11. !Unknown 30.932 250 J 12. !Unknown 32.485 1200 J B 13. !Unknown 32.664 160 J 14. !Unknown 48.162 250 J 15.	1 8.		!Unknown	į	28.833	!	91	J	į
10. !Unknown Carboxylic Acid 30.753 1800 J B 11. !Unknown 30.932 250 J 12. !Unknown 32.485 1200 J B 13. !Unknown 32.664 160 J 14. !Unknown 48.162 250 J 15.	9.		!Unknown Carboxylic Acid	į	30.514	!	130	J	j
12. Unknown 32.485 1200 J B 13. Unknown 32.664 160 J 14. Unknown 48.162 250 J 15.	! 10.			ţ	30.753	!	1800	ЈВ	!
13. Unknown 32.664 160 J 14. Unknown 48.162 250 J 15.	! 11.		!Unknown	ţ.	30.932	!	250	J	!
14. Unknown 48.162 250 J 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29.	! 12.		!Unknown	!	32.485	!	1200	Ј В	Į.
15.	! 13.		! Unknown	1	32.664	!	160	J	!
16.	. 14		! Unknown	!	48.162	!	250	J	Į.
16.	1 15.		!	!		!	!		!
17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29.	1 16.		!	_ <u>.</u> -		!			!
18	17.		[- _! -		!			<u> </u>
19. 20. 21. 22. 23. 24. 25. 26. 27. 28.	. 18		!	_ <u> </u>		!			į
20	19.		!	_ ! _		!			!
21	. 20.		!	1		!			!
22 .	! 21.		!	_ ! _		!			!
23.	22.		!	_ i_		į_			!
24	! 23.		!	_ <u> </u>		ļ_			_!
25.	! 24.		!	_ ! _		!			_ !
26.	25.		!	_ i_		į			_!
28.	! 26.		!	_ !_		!			_ !
29.	! 27.		!	_ <u>_</u> _		·!_			_!
! 29!!!!!	28		<u> </u>	_ <u>!</u> _		!			_!
! 30.	! 29		!	- _! -		ļ_			!
	30.		!	_ <u>;</u> _		!_			_ !
	1		!	_! -		!			_!

page 1 of 1

FORM I SV-1

OLM03.0



Account Number: 06101



Page 1 of 11

Lancaster Laboratories Sample No. SW 4692566

TIE023:6020:S010030 Soil Sample

Painesville, OH

Collected:01/19/2006 10:45 by MT

Submitted: 01/20/2006 09:00 Tierra Solutions, Inc.

Submitted: 01/20/2006 09:00 Tierra Solu Reported: 02/16/2006 at 00:55 PO Box 1487

Discard: 03/03/2006 Painesville OH 44077

6020- SDG#: PNV88-02

CAT			Dry	Dry Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00383	TOC by Lloyd Kahn	n.a.	3,600.	210.	mg/kg	1
01353	Moisture	n.a.	14.0	0.50	કુ	1
01441	рН	n.a.	7.48	0.0100	Std. Units	1
	The pH of the method blank (bac The pH was performed on a 1:1: of deionized water) after being	slurry (50 gm o	of sample and 50		6.	
05892	Hexavalent Chromium by IC	18540-29-9	N.D.	0.23	mg/kg	1
07552	ORP Observed	n.a.	124.	1.0	mV	1
3.002	The ORP reported is the observe during the analysis.	ed potential of	the platinum e	lectrode used		

07157 OLM03.2 Volatiles in Soils

A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

O7125 SVOA Library Search OLM03.2

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form. An "X" indicates an isomer of the listed compound.

07126 VOA Library - Search OLM03.2

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.





Page 2 of 11

Lancaster Laboratories Sample No. SW 4692566

TIE023:6020:S010030 Soil Sample

Painesville, OH

by MT Collected:01/19/2006 10:45

Account Number: 06101

Submitted: 01/20/2006 09:00

Reported: 02/16/2006 at 00:55

Discard: 03/03/2006

Tierra Solutions, Inc.

PO Box 1487

Painesville OH 44077

6020- SDG#: PNV88-02

Laboratory Chronicle

		Laboratory	CITO	IIICIE		
CAT				Analysis	_	Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00159	Mercury	SOW ILM04.0	1	01/30/2006 12:02	Damary Valentin	1
01643	Aluminum	SOW ILM04.0	1	01/31/2006 08:11	Joanne M Gates	1
01650	Calcium	SOW ILM04.0	1	01/31/2006 08:11	Joanne M Gates	1
01654	Iron	SOW ILMO4.0	1	01/31/2006 08:11	Joanne M Gates	1
01657	Magnesium	SOW ILM04.0	1	01/31/2006 08:11	Joanne M Gates	1
01662	Potassium	SOW ILM04.0	1	01/31/2006 08:11	Joanne M Gates	1
01667	Sodium	SOW ILMO4.0	1	01/31/2006 08:11	Joanne M Gates	1
06925	Thallium	SOW ILM04.0	2	02/08/2006 12:56	Joanne M Gates	1
06935	Arsenic	SOW ILMO4.0	1	01/31/2006 08:11	Joanne M Gates	1
06936	Selenium	SOW ILMO4.0	2	02/08/2006 12:56	Joanne M Gates	1
06944	Antimony	SOW ILM04.0	1	01/31/2006 08:11	Joanne M Gates	1
06946	Barium	SOW ILMO4.0	1	01/31/2006 08:11	Joanne M Gates	1
06947	Beryllium	SOW ILMO4.0	1	01/31/2006 08:11	Joanne M Gates	1
06949	Cadmium	SOW ILM04.0	. 1	01/31/2006 08:11	Joanne M Gates	1
06951	Chromium	SOW ILM04.0	1	01/31/2006 08:11	Joanne M Gates	1
06952	Cobalt	SOW ILMO4.0	1	01/31/2006 08:11	Joanne M Gates	1
06953	Copper	SOW ILMO4.0	1	01/31/2006 08:11	Joanne M Gates	1
06955	Lead	SOW ILMO4.0	2	02/08/2006 12:56	Joanne M Gates	1
06958	Manganese	SOW ILMO4.0	1	01/31/2006 08:11	Joanne M Gates	1
06961	Nickel	SOW ILM04.0	1	01/31/2006 08:11	Joanne M Gates	1
06966	Silver	SOW ILMO4.0	1	01/31/2006 08:11	Joanne M Gates	1
06971	Vanadium	SOW ILMO4.0	1	01/31/2006 08:11	Joanne M Gates	1
06971	Zinc	SOW ILMO4.0	1	01/31/2006 08:11	Joanne M Gates	1
00383	TOC by Lloyd Kahn	Lloyd Kahn modified	1	02/02/2006 11:04	James S Mathiot	1
01353	Moisture	SOW OLM03.2	1	01/24/2006 16:56	Scott W Freisher	1
01333	pH	SOW OLMO4.3	1	01/24/2006 18:30	Luz M Groff	1
05892	Hexavalent Chromium by IC	SW-846 7199	1	01/25/2006 10:51	William L Hamaker Jr	1
05910	Total Cyanide CLP (solid)	SOW ILMO4.0	1	01/27/2006 17:39	Venia B McFadden	1
07552	ORP Observed	ASTM D1498	1	01/30/2006 08:30	Michelle L Heidig	1
04562	OLM03.2	SOW OLM03.2	1	01/31/2006 18:02	Richard A Shober	1
04302	Pesticides/PCBs/Soil				_	_
04438	OLM03.2 Semivolatiles/Soil	SOW OLM03.2	1	02/07/2006 00:03	Linda M Hartenstine	1
07157	OLM03.2 Volatiles in Soils	SOW OLM03.2	1	01/26/2006 20:01	Jason M Long	0.87
00494	SW CLP Hg Digest	SOW ILM04.0	1	01/29/2006 23:15	Annamaria Stipkovits	1
01849	SW CLP ICP Digest	SOW ILM04.0	1	01/29/2006 20:50	Annamaria Stipkovits	1
04185	CLP Soil Extraction	SOW OLM03.2	1	01/25/2006 07:00	Danette S Cavalier	1
04607	CLP Soil Extraction	SOW OLM03.2	1	01/23/2006 05:00	Mark P Mastropietro	1
05909	CLP Cyanide Solid	SOW ILM04.0	1	01/25/2006 11:40	Choon Y Tian	1
55565	Distillation					
07578	GC/MS-HL Encore Prep-NC	sw-846 5035	1	01/20/2006 16:01	Justin M Bowers	n.a.
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	01/24/2006 22:15	Daniel S Smith	1
08389	GC/MS - LL Encore Prep	SW-846 5035	1	01/20/2006 16:10	Justin M Bowers	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035	2	01/20/2006 16:11	Justin M Bowers	n.a.



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		1			EP.	A SAMPLE NO.
	INORGANIC	ANALYSIS DATA	SH	EET	.—	,
						6020-
ab Name: LANCASTER LABO	RATORIES	Contract:				
_	No.:				SD	G No.: PNV88
Matrix (soil/water): SOI	ь	-	Ī	ab Sai	mple	ID: 4692566
Level (low/med): LOW			Ľ	ate R	eceiv	ed: 01/20/06
Solids: 86	.0					
Concentratio	n Units (ug	/L or mg/kg dr	y w	reight:): MG	/KG
1		_ 			 ,	
CAS No.	 Analyte	 Concentration			M	
i	1		i _ i		i i	
7429-90-5	Aluminum_				P I	
	Antimony		U	N	P	
· · · · · · · · · · · · · · · · · · ·	Arsenic			N	_ P	
7440-39-3		72.9	۱ ا		_ P	
	Beryllium				P_	
7440-43-9	Cadmium	0.15	ΙUΙ		[P	
7440-70-2	- Calcium	21800	1_1		P_	
7440-47-3	_ Chromium_				_ P_	
J 7440-48-4	Cobalt	13.8	ا_I		_ P_	
7440-50-8	_ Copper	25.4	[]		_{P_	
_7439-89-6	Iron	32900	1_1		P_	
_7439-92-1	_ Lead	15.9	ا_ا		_ P_	
_7439-95-4	_ Magnesium	9030	_	_*	_ P_	
_7439-96-5	_ Manganese	I362	 _		_ P_	
_7439-97-6	_ Mercury	0.021			_ICVI	
_7440-02-0	_ Nickel	[35.6			_ P_	
· —	_ Potassium				_ P_	
_7782-49-2	_ Selenium_				_ P_	
_7440-22-4	_ Silver	10.30			_ P_	
_7440-23-5		157			_ P_	
·	_ Thallium_				_ P_	
· <u></u>	_ Vanadium_				_ P_	
1_7440-66-6		79.8			_ P_	
!57-12-5	_ Cyanide	0.22			- CA	
olor Before: BROWN	\	ty Before:	'-		-'' Te	xture: MEDIUM
color After: YELLOW		ty After:		_	_	tifacts:
Comments:	01411	-,		_		· <u></u>
Onmones.						
-						
						TT NO.4 A
		FORM I - IN				ILM04.0

USEPA - CLP





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1A VOLATILE ORGANICS ANALYSIS DATA SHEET	EP.	A SAMPL	E NO.
Matrix: (soil/water) SOIL Lab Sample ID: 4692566 Sample wt/vol: 5.78 (g/mL) g Lab File ID: HF07566.i/0 Level: (low/med) LOW Date Received: 01/20/06 Moisture: not dec. 14 Date Analyzed: 01/26/06 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0	_ (u	26b.b/r	! ! ! j26s03.d
! 74-87-3Chloromethane !		! U	- <u>,</u>
! 75-01-4Vinyl Chloride !	2	! U	1
! 74-83-9Bromomethane !	3	! 0	!
! 75-00-3Chloroethane !	3	! U	!
! 75-35-41,1-Dichloroethene !	2	! U	ļ.
! 67-64-1Acetone !	14	!	į
! 75-15-0Carbon Disulfide !	6	! J	!
! 75-09-2Methylene Chloride !	2	! U	ļ
! 75-34-31,1-Dichloroethane !	1	! U	!
! 540-59-01,2-Dichloroethene (Total) !	2	! U	į
! 78-93-32-Butanone !	7	! U	!
! 67-66-3Chloroform !	1	! U	ļ.
! 71-55-61,1,1-Trichloroethane !	1	! U	į
56-23-5Carbon Tetrachloride	1	! U	!
! 71-43-2Benzene !	2	! J	!
! 107-06-21,2-Dichloroethane !	2	! U	!
! 79-01-6Trichloroethene !	1	! U	!
! 78-87-51,2-Dichloropropane !	3	! U	ļ
! 75-27-4Bromodichloromethane !	2	! U	!
! 10061-01-5cis-1,3-Dichloropropene !	1	! U	!
! 108-10-14-Methyl-2-Pentanone !	3	! U	ļ.
! 108-88-3Toluene !	4	! J	ļ
! 10061-02-6trans-1,3-Dichloropropene !	1	! U	į
! 79-00-51,1,2-Trichloroethane !	2	! U	!
! 127-18-4Tetrachloroethene	1	! U	!
! 591-78-62-Hexanone !	3	! U	!
! 124-48-1Dibromochloromethane !	1	! U	ļ
! 108-90-7Chlorobenzene !	1	! U	ţ.
! 100-41-4Ethylbenzene !	1	! U	i
! 1330-20-7Xylene (Total)	2	! J	ļ
1		!	!
page 1 of 2 FORM I VOA		OLM03	.0



Analysis Report



Page 5 of 11

1.7 VOLATILE ORGANICS AN	=	EP	A SAMPI	LE NO.
VOLATILE ORGANICS AN	VADIOIO DATA DIBBI	!—		i
		!	6020-	!
Lab Name: Lancaster Laboratories	Contract:	!		!
Lab Code: LANCAS Case No.:	SAS No.:	SDG	No.:	
Matrix: (soil/water) SOIL	Lab Sample ID: 4692566			
Sample wt/vol: 5.78 (g/mL) g	Lab File ID: HP07566.i	/06jan	126b.b/1	rj26s03.d
Level: (low/med) LOW		6		
Moisture: not dec. 14	Date Analyzed: 01/26/0	6		
GC Column: DB-624 ID: 0.25 (mm)				
Soil Extract Volume: (uL)	Soil Aliquot Volume: CONCENTRATION UNITS		ıL)	
CAS NO. COMPOUND	(ug/L or ug/Kg) MDL u	g/Kg	Q	
100-42-5Styrene		1	! U	_ _!
! 75-25-2Bromoform	!	1	! U	<u>į</u>
! 79-34-51,1,2,2-Tetr	rachloroethane !	1	ŀΰ	į
!	!!		_!	_!
page 2 of 2				
FORM I V	JOA		OLM0:	3.0





Page 6 of 11

18	EPA SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET	
	!
	! 6020- !
Lab Name: Lancaster Laboratories Contract:	!!
Lab Code: LANCAS Case No.: SAS No.:	SDG No.:
Matrix: (soil/water) SOIL Lab Sample	ID: 4692566
Sample wt/vol: 30 (g/mL) G Lab File ID	
Level: (low/med) LOW Date Receiv	ed: 01/20/06
% Moisture: not dec: 14 dec: Date Extrac	ted: 01/23/06
Concentrated Extract Volume: 500 (uL) Date Analyz	ed: 02/07/06
Injection Volume: 2 (uL) Dilution Fa	
GPC Cleanup: (Y/N) Y pH: Extraction	: Sonc
CONCENTRATION UNITS:	
CAS NO. COMPOUND (ug/L or ug/Kg) MDL UG	/KG Q
! 108-95-2 Phenol !	39 ! U !
! 111-44-4 bis(2-Chloroethyl)ether !	39 ! U !
! 95-57-8 2-Chlorophenol!	39 ! U !
! 541-73-1 1,3-Dichlorobenzene !	39 ! U !
! 106-46-7 1,4-Dichlorobenzene !	39 ! U !
! 95-50-1 1,2-Dichlorobenzene !	39 ! U !
95-48-7 2-Methylphenol !	39 ! U !
! 108-60-1 2,2'-oxybis(1-Chloropropane)!	39 ! U !
! 106-44-5 4-Methylphenol !	39 ! U !
! 621-64-7 N-Nitroso-di-n-propylamine !	39 ! U !
! 67-72-1 Hexachloroethane	39 ! U !
! 98-95-3 Nitrobenzene!	39 ! U !
! 78-59-1 Isophorone !	39 ! U !
! 88-75-5 2-Nitrophenol!	39 ! U !
! 105-67-9 2,4-Dimethylphenol !	78 ! U !
! 111-91-1 bis(2-Chloroethoxy)methane!	39 ! U !
! 120-83-2 2,4-Dichlorophenol!	39 ! U !
! 120-82-1 1,2,4-Trichlorobenzene !	39 ! U !
! 91-20-3 Naphthalene!	39 ! U !
! 106-47-8 4-Chloroaniline!	160 ! U !
! 87-68-3 Hexachlorobutadiene!	39 ! U !
! 59-50-7 4-Chloro-3-methylphenol!	39 ! U !
91-57-6 2-Methylnaphthalene!	39 ! U !
! 77-47-4 Hexachlorocyclopentadiene !	78 ! U !
! 88-06-2 2,4,6-Trichlorophenol !	39 ! U !
95-95-4!	39 ! U !
! 91-58-7 2-Chloronaphthalene!	39 ! U !
! 88-74-4 2-Nitroaniline!	39 ! U !
! 131-11-3 Dimethylphthalate!	39 ! U !
! 606-20-2 2,6-Dinitrotoluene!	39 ! ʊ !
!	!!
FORM I SV-1	OLM03.0





Page 7 of 11

1C	EPA SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET	
	!
	! 6020- !
Lab Name: Lancaster Laboratories Contract:	!!
Lab Code: LANCAS Case No.: SAS No.:	SDG No.:
Matrix: (soil/water) SOIL Lab Sa	mple ID: 4692566
Sample wt/vol: 30 (g/mL) G Lab Fi	le ID: hb063.d
Level: (low/med) LOW Date R	eceived: 01/20/06
* Moisture: not dec: 14 dec: Date E	xtracted: 01/23/06
Concentrated Extract Volume: 500 (uL) Date A	nalyzed: 02/07/06
	on Factor: 1.0
GPC Cleanup: (Y/N) Y pH: Extra	ction: Sonc
CONCENTRATION UNIT	S:
CAS NO. COMPOUND (ug/L or ug/Kg) MD	
GRO NO.	
! 208-96-8 Acenaphthylene !	39 ! U !
! 99-09-2 3-Nitroaniline !	78 ! U !
! 83-32-9 Acenaphthene!	39 ! U !
! 51-28-5 2,4-Dinitrophenol !	190 ! U !
! 100-02-7 4-Nitrophenol!	39 ! U !
! 132-64-9 Dibenzofuran !	39 ! ប !
! 121-14-2 2,4-Dinitrotoluene !	39 ! Ū !
! 84-66-2 Diethylphthalate!	39 ! Ū !
! 7005-72-3 4-Chlorophenyl-phenylether!	39 ! U !
! 86-73-7 Fluorene!	39 ! U !
! 100-01-6 4-Nitroaniline !	78 ! U !
1 534-52-1 4,6-Dinitro-2-methylphenol !	39 ! ប !
! 86-30-6 N-Nitrosodiphenylamine!	39 ! ប !
! 101-55-3 4-Bromophenyl-phenylether!	39 ! U !
! 118-74-1 Hexachlorobenzene!	39 ! U !
	190 ! U !
! 87-86-5 Pentachlorophenol	39 ! U !
! 85-01-8 Phenanthrene !	39 ! U !
! 120-12-7 Anthracene	39 ! ប !
! 86-74-8 Carbazole !	78 ! U !
! 84-74-2 Di-n-butylphthalate	39 ! U !
! 206-44-0 Fluoranthene	39 ! U !
! 129-00-0 Pyrene	39 ! U !
! 85-68-7 Butylbenzylphthalate	78 ! U !
! 91-94-1 3,3'-Dichlorobenzidine	39 ! U !
! 56-55-3 Benzo(a) anthracene	39 ! U !
! 117-81-7 bis(2-Ethylhexyl)phthalate!	39 ! U !
! 218-01-9 Chrysene	39 ! U !
! 117-84-0 Di-n-octylphthalate	39 ! U !
! 205-99-2 Benzo(b) fluoranthene	39 ! U !
! 207-08-9 Benzo(k)fluoranthene	39 : U :
!	
FORM I SV-2	0.000.0



Analysis Report



Page 8 of 11

1C cont			EPA SAMPLE N		
SEMIVOLATILE ORGANICS	<u> </u>		<u></u>		
		1		ļ.	
		!	6020-	ţ.	
Lab Name: Lancaster Laboratories	Contract:	!		!	
Lab Code: LANCAS Case No.:	SAS No.:	SDG	No.:_		
Matrix: (soil/water) SOIL	Lab Sa	mple ID:	469256	6	
Sample wt/vol: 30 (g/mL) G	Lab Fi	le ID: hb	063.d		
Level: (low/med) LOW	Date F	Received:	01/20	/06	
% Moisture: not dec: 14 dec:	Date F	xtracted:	01/23	/06	
Concentrated Extract Volume: 500	(uL) Date A	nalyzed:	02/07	/06	
Injection Volume: 2 (uL)		on Factor:			
GPC Cleanup: (Y/N) Y pH:	Extra	ction: Son	c		
•	CONCENTRATION UNIT	'S:			
CAS NO. COMPOUND	(ug/L or ug/Kg) ME	L UG/KG	Q		
! 50-32-8 Benzo(a)pyre	ene !	39	! U	_ _!	
! 193-39-5 Indeno(1,2,3	-cd)pyrene!	39	יט!	!	
! 53-70-3 Dibenz(a,h)a	inthracene !	39	! 0	!	
! 191-24-2 Benzo(g,h,i)	perylene !	39	U !	!	
!	!		!	!	
FORM I S	SV-3		0.	LM03.0	





CAS NO.

Page 9 of 11

	ORGANICS	1D S ANALYSIS DAT	_	EPA SAMPLE NO.
Lab Name:Lancaster	Laboratories	Contract:	!	! 5020- !
Lab Code: Matrix: (soil/water Sample wt/vol: % Moisture: 14 Extraction: (SepF) Concentrated Extrac Injection Volume: GPC Cleanup: (Y/1)	30 (g/mL) decanted: (Y /Cont/Sonc) ct Volume: 1 (uL)) g Y/N)N SONC 10000 (uL)	SDG No.: Lab Sample ID: 469 Lab File ID: 4D135 Date Received: 01 Date Extracted: 01 Date Analyzed: 01 Dilution Factor: Sulfur Cleanup: (Y)	92566 3.55R /20/06 /25/06 /31/06
		CONCEN	TRATION UNITS:	

(ug/L or ug/Kg) MDL ug/kg COMPOUND

_			— .
į		! !	!
	319-84-6alpha-BHC	! 0.20!0	!
	58-89-9gamma-BHC (Lindane)	! 0.20!0	!
ļ	319-85-7beta-BHC	! 0.20!ប	į
ļ	319-86-8delta-BHC	! 0.20!U	!
ļ	76-44-8Heptachlor	! 0.20!0	ļ
ţ	309-00-2Aldrin	! 0.20!0	!
į	1024-57-3Heptachlor epoxide	! 0.20!U	į
ļ	5103-74-2gamma-Chlordane	! 0.20!0	į
ļ	5103-71-9alpha-Chlordane	! 0.20!U	!
į	72-55-94,4'-DDE	! 0.38!U	!
Ţ	959-98-8Endosulfan I	! 0.20!U	!
į	60-57-1Dieldrin	! 0.38!U	!
1	72-20-8Endrin	! 0.38!U	i
į	72-54-84,4'-DDD	! 0.51!U	į
ţ	33213-65-9Endosulfan II	! 0.38!0	į
ļ	50-29-34,4'-DDT	! 0.38!U	į.
ļ	7421-93-4Endrin aldehyde	! 0.78!U	!
!	72-43-5Methoxychlor	! 2.3!U	į
į	1031-07-8Endosulfan sulfate	! 0.38!U	!
į	53494-70-5Endrin ketone	! 0.38!U	!
ļ	12674-11-2Aroclor-1016	! 17!U	į.
ţ	11104-28-2Aroclor-1221	! 20!U	ļ.
ļ	11141-16-5Aroclor-1232	! 30!U	!
ţ	53469-21-9Aroclor-1242	! 10!U	!
!	12672-29-6Aroclor-1248	! 6.9!U	ţ
ļ	11097-69-1Aroclor-1254	! 10!0	<u> </u>
!	11096-82-5Aroclor-1260	! 9.3!U	!
į	8001-35-2Toxaphene	! 20!0	!
!		t!	_!

FORM I

OLM03.0



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VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDEN	ATIFIED COMPOUNDS			<u>.</u>
		! (6020-	!
Lab Name: Lancaster Laboratories	Contract:	!		!
Lab Code: LANCAS Case No.:	SAS No.:	SDG 1	No.:	
Material (anil/restor) COII	Tab Sample ID: 4692566			

Matrix: (soil/water) SOIL

Sample wt/vol: 5.78 (g/mL) g

Level: (low/med) LOW

Moisture: not dec. 14

GC Column: DB-624 ID: 0.25 (mm)

Soil Extract Volume: (uL)

Number TICs found: 11

Lab Sample ID: 4692566

Lab File ID: HP07566.i/06jan26b.b/rj26s03.d

Date Received: 01/20/06

Date Analyzed: 01/26/06

Dilution Factor: 1.0

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/Kg

EPA SAMPLE NO.

CAS NUMBER	! COMPOUND NAME		EST. CONC.	
		!=======! ! 2.34 !		!====== ! J
1.	!Unknown			! J
2.	!Unknown			
3. 109-66-0	! Pentane			! NJ ! J
4.	!Unknown alkane			: J ! J
5.	!Unknown alkane	! 5.20 !		1 J
6.	!Unknown hydrocarbon	! 6.11 !		
7.	!Unknown alicyclic	! 7.03 !		! J 1 .T
8.	!Unknown hydrocarbon	! 8.58 !		. •
9.	!Unknown siloxane	! 10.33 !		! J B
10.	!Unknown	! 10.66 !		! J
11.	!Unknown siloxane	! 12.34 !	10	! J B
12	_!	- <u>:</u> :		:———
13	_!	- <u>:</u> :		!
14.	[!]	-::		:
15	·	-:i	_ 	:
16	!	-!		:
1/	_ ·	_!		<u>:</u>
18.	_!	-: :		·
19	_!	-!		·
20	!	-!- 		<u>:</u>
21	!	-!		:
22	!	- !		:
23	_!	-!		!
24	_!	-!		!
25	!	-!		:
26	!			!
27.		_!		!
28	_ !	-!		!
		į		!
30	!	_!!		!
	į.	.!:	!	!

FORM I VOA-TIC

OLM03.0

MEMBER

EPA SAMPLE NO.

OLM03.0



Page 11 of 11

1 F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

! 6020-Lab Name: Lancaster Laboratories Contract: !

Lab Code: LANCAS Case No.: SDG No.: SD

Lab Sample ID: 4692566 Matrix: (soil/water) SOIL

Matrix: (soil/water) SOIL

Sample wt/vol: 30 (g/mL) g

Level: (low/med) LOW

% Moisture: 14 Decanted: (Y/N)

Concentrated Extract Volume: 500 (uL)

Injection Volume: 2 (uL)

GPC Cleanup: Y

Lab File ID: 4092500

Date Received: 01/20/06

Date Extracted: 01/23/06

Date Analyzed: 02/07/06

Dilution Factor: 1

Extraction: Sonc

pH: Extraction.

CONCENTRATION UNITS: GPC Cleanup: Y Number TICs found: 19 CONCENTRATION UI

(ug/L or ug/Kg) ug/Kg

CAS NUMBER	! COMPOUND NAME	! ==!:	RT !	EST. CONC.	_
 1.	== =================================		14.887 !		! J
2.	! Unknown	!	15.747 !	80	! J
3.	!Unknown	ļ	16.093 !	87	! J
4.	!Unknown	!	18.022 !	190	! J
5.	!Unknown	!	18.249 !	100	! J
6.	! Unknown	!	19.942 !	110	! J
7.	!Unknown	1	21.965 !	120	! J
8.	!Unknown	!	23.701 !	82	! J
9.	!Unknown	į	25.271 !	320	! J B
10.	!Unknown Carboxylic Acid	į.	28.503 !	160	! J
11.	! Unknown	!	28.822 !	90	! J
12.	Unknown	!	29.051 !	98	! J
13.	!Unknown Carboxylic Acid	!	30.516 !	200	! J
14.	!Unknown Carboxylic Acid	!	30.756 !	2300	! J B
15.	!Unknown	!	30.936 !	250	! J
16.	!Unknown	į	31.435 !	92	! J
17.	!Unknown	!	32.493 !	1600	! J
18.	!Unknown	!	47.370 !	1600	! J
19.	! Unknown	!	48.171 !	160	! J
20	<u></u>	!	!		!
21	!	!	!		!
22			!		!
23.		!	!		!
24.	!	!	!		!
25	!	!	!		!
26.	!	!	!		!
27	!	!	!		!
28.		!	!		!
29.	!	!	!		!
30.	!	!	!		!
					!

FORM I SV-1



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Lancaster Laboratories Sample No. SW 4692567

TIE023:6014:S010030 Soil Sample

Painesville, OH

Collected:01/19/2006 09:15

by MT

Account Number: 06101

Submitted: 01/20/2006 09:00

Tierra Solutions, Inc. PO Box 1487

Reported: 02/16/2006 at 00:55

Discard: 03/03/2006

Painesville OH 44077

חדי

6014- SDG#: PNV88-03

				DIĀ		
CAT			Dry	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00383	TOC by Lloyd Kahn	n.a.	2,800.	600.	mg/kg	1
01353	Moisture	n.a.	12.5	0.50	£	1
01441	рН	n.a.	7.50	0.0100	Std. Units	1
	The pH of the method blank (ba The pH was performed on a 1:1 of deionized water) after bein	slurry (50 gm o	of sample and		06.	
05892	Hexavalent Chromium by IC	18540-29-9	N.D.	0.23	mg/kg	1
07552	ORP Observed	n.a.	118.	1.0	mV	1
	The ORP reported is the observ during the analysis.	red potential of	f the platinum	electrode used		
07157	OLMO3 2 Volatiles in Soils					

07157 OLM03.2 Volatiles in Soils

A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

07125 SVOA Library Search OLM03.2 The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form. An "X" indicates an isomer of the listed compound.

07126 VOA Library - Search OLM03.2 The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Analysis Report



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Dilution

Lancaster Laboratories Sample No. SW 4692567

TIE023:6014:S010030 Soil Sample

Painesville, OH

Collected:01/19/2006 09:15

by MT

Account Number: 06101

Submitted: 01/20/2006 09:00

Reported: 02/16/2006 at 00:55

Discard: 03/03/2006

Tierra Solutions, Inc.

PO Box 1487

Painesville OH 44077

6014- SDG#: PNV88-03

Laboratory Chronicle
Analysis

CAT				Analysis		Diractor.
No.	Analysis Name	Method	Trial#		Analyst	Factor
00159	Mercury	SOW ILMO4.0	1	01/30/2006 12:03	Damary Valentin	1
01643	Aluminum	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	1 1
01650	Calcium	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	_
01654	Iron	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	1
01657	Magnesium	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	1
01662	Potassium	SOW ILMQ4.0	1	01/31/2006 08:16	Joanne M Gates	1
01667	Sodium	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	1
06925	Thallium	SOW ILM04.0	1	02/08/2006 13:00	Joanne M Gates	1 1
06935	Arsenic	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	-
06936	Selenium	SOW ILM04.0	2	02/08/2006 13:00	Joanne M Gates	1 1
06944	Antimony	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	_
06946	Barium	SOW ILMO4.0	1	01/31/2006 08:16	Joanne M Gates	1
06947	Beryllium	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	1
06949	Cadmium	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	1
06951	Chromium	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	1
06952	Cobalt	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	1
06953	Copper	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	1
06955	Lead	SOW ILM04.0	2	02/08/2006 13:00	Joanne M Gates	1
06958	Manganese	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	1
06961	Nickel	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	1
06966	Silver	SOW ILM04.0	1	01/31/2006 08:16	Joanne M Gates	1
06971	Vanadium	SOW ILMO4.0	1	01/31/2006 08:16	Joanne M Gates	1
06972	Zinc	SOW ILMO4.0	1	01/31/2006 08:16	Joanne M Gates	1
00383	TOC by Lloyd Kahn	Lloyd Kahn modified	1	02/02/2006 11:41	James S Mathiot	1
01353	Moisture	SOW OLM03.2	1	01/24/2006 16:56	Scott W Freisher	1
01441	На	SOW OLM04.3	1	01/24/2006 18:30	Luz M Groff	1
05892	Hexavalent Chromium by IC	SW-846 7199	1	01/25/2006 11:07	William L Hamaker Jr	1
05910	Total Cyanide CLP (solid)	SOW ILM04.0	1	01/27/2006 17:41	Venia B McFadden	1
07552	ORP Observed	ASTM D1498	1	01/30/2006 08:30	Michelle L Heidig	1
04562	OLM03.2	SOW OLM03.2	1	01/31/2006 18:32	Richard A Shober	1
• - • • -	Pesticides/PCBs/Soil					•
04438	OLM03.2 Semivolatiles/Soil	SOW OLM03.2	1	02/07/2006 01:05	Linda M Hartenstine	1
07157	OLM03.2 Volatiles in Soils	SOW OLM03.2	1	01/26/2006 20:27	Jason M Long	0.81
00494	SW CLP Hg Digest	SOW ILMO4.0	1	01/29/2006 23:15	Annamaria Stipkovits	1
01849	SW CLP ICP Digest	SOW ILM04.0	1	01/29/2006 20:50	Annamaria Stipkovits	1
04185	CLP Soil Extraction	SOW OLM03.2	1	01/25/2006 07:00	Danette S Cavalier	1
04607	CLP Soil Extraction	SOW OLM03.2	1	01/23/2006 05:00	Mark P Mastropietro	1
05909	CLP Cyanide Solid	SOW ILMO4.0	1	01/25/2006 11:40	Choon Y Tian	1
	Distillation			_		
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	01/20/2006 16:02	Justin M Bowers	n.a.
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	01/24/2006 22:15	Daniel S Smith	1
08389	GC/MS - LL Encore Prep	SW-846 5035	1	01/20/2006 16:12	Justin M Bowers	n.a.
08389	GC/MS - LL Encore Prep	sw-846 5035	2	01/20/2006 16:13	Justin M Bowers	n.a.
	•					



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	USEPA - CLP					
	1			EPA	SAMPLE NO.	
TNORGAN'	IC ANALYSIS DATA	SH	EET			
21101.0111				1		ŀ
				i	6014-	Ì
				•		
Lab Name: LANCASTER LABORATORIES	Contract:					
Lab Code: Case No.:				- SDG	No.: PNV88	
Matrix (soil/water): SOIL		ī	ah Sar	nnle I	D: 4692567	
Level (low/med): LOW				-	d: 01/20/06	
			,ucc 10		01,20,00	
% Solids: 87.5 Concentration Units (ia/I or ma/ka dri	7 %	eight	· MG/	/KG	
Concentration units (ig/L Or mg/kg or	yn	,e1911C	, 110,		
		1 1		<u> </u>		
	 - Concentration	 C	0	M		
CAS No. Analyte	e Concentration	-	Q	12		
7.00.00.5	10000	!-!		- ' '		
[_7429-90-5_ Aluminu				_ P_		
7440-36-0 Antimon				_ P_		
7440-38-2 Arsenic				_ P_		
1_7440-39-3_{Barium_				_ P_		
7440-41-7 Berylli				_ P_		
7440-43-9 Cadmium				_ P_		
7440-70-2 Calcium	!23300			_ P_		
7440-47-3 Chromiu		!_!		_ P_		
7440-48-4 Cobalt_	12.8			_ P_		
[_7440-50-8_ Copper_				_ P_		
7439-89-6 Iron				_ P_		
7439-92-1 Lead	16.3			_ P_		
7439-95-4 Magnesi		ا_ا	_*	_ P_		
7439-96-5 Mangane		_		_ P_		
7439-97-6 Mercury				_ICVI		
7440-02-0 Nickel _		1_1		_ P_		
7440-09-7_ Potassi	um 1960	1_1		_ P_		
7782-49-2 Seleniu		וטו		_ P_		
7440-22-4 Silver_	0.23	B		_ P_		
7440-23-5 Sodium	171	B		_ P		
[7440-28-0 Thalliu		ן ען	l	_ P_		
7440-62-2 Vanadiu		1_1	l	P		
7440-66-6 Zinc		ı – ı		P		
57-12-5 Cyanide		וּטוּ		CA		
\ <u></u>				_1 1		
Color Before: BROWN Cla	rity Before:			Tex	kture: MEDIUM	
	rity After:			Art	tifacts:	
Comments:			_			
~~						
	FORM I - IN				ILM04.	0
	= = = = = = = = = = = = = = = = = = = =					





Page 4 of 11

1A VOLATILE ORGANICS ANALYSIS DATA SHEET		SAMPLE NO.
	<u>!</u> !	6014- !
Bab Mane: Harristott	SDG N	0.:
Lab Code: LANCAS Case No.: SAS No.: SAS No.: Lab Sample ID:		<u> </u>
Sample wt/vol: 6.17 (g/mL) g Lab File ID: HI Level: (low/med) LOW Date Received: GC Column: DB-624 ID: 0.25 (mm) Dilution Factor Soil Extract Volume: (uL) Soil Aliquot Vo CONCENTRATIC CAS NO. COMPOUND (ug/L or ug/Kg	P07566.i/06jan2 01/20/06 01/26/06 :: 1.0 blume: (uL on UNITS:	
! 74-87-3Chloromethane	2	! U !
! 75-01-4Vinyl Chloride	. 2	
! 74-83-9Bromomethane	! 3	! U !
! 75-00-3Chloroethane	! 3	! U !
! 75-35-41,1-Dichloroethene	. 2	! U !
! 67-64-1Acetone	! 9	! J !
! 75-15-0Carbon Disulfide	! 7	! J !
! 75-09-2Methylene Chloride	. 2	! U !
! 75-34-31,1-Dichloroethane	0.9	! U !
! 540-59-01,2-Dichloroethene (Total)	! 2	! U !
! 78-93-32-Butanone	! 6	! U !
! 67-66-3Chloroform	. 0.9	! U !
! 71-55-61,1,1-Trichloroethane	. 0.9	! U !
! 56-23-5Carbon Tetrachloride	9.9	; U ;
! 71-43-2Benzene	! 1	! J !
! 107-06-21,2-Dichloroethane	! 2	i u i
! 79-01-6Trichloroethene	9.0	! U !
78-87-51,2-Dichloropropane	! 3	! U !
! 75-27-4Bromodichloromethane	! 2	! U !
! 10061-01-5cis-1,3-Dichloropropene	! 0.9	! U !
! 108-10-14-Methyl-2-Pentanone	! 3	! U !
! 108-88-3Toluene	! 3	! J !
! 10061-02-6trans-1,3-Dichloropropene	! 0. 9	! U !
! 79-00-51,1,2-Trichloroethane	! 2	! U !
! 127-18-4Tetrachloroethene	i 0.9	! U !
591-78-62-Hexanone	! 3	! U !
! 124-48-1Dibromochloromethane	! 0.9	! U !
! 108-90-7Chlorobenzene	! 0.9	! U !
! 100-41-4Ethylbenzene	! 0.9	! U !
! 1330-20-7Xylene (Total)	! 1	! J !
	!	_!!
page 1 of 2		OLM03.0

0042



FORM I VOA

Analysis Report



Page 5 of 11

1A VOLATILE ORGANICS ANA	LYSIS DATA SHEET	EP2	A SAMPL	E NO.
Lab Name: Lancaster Laboratories Lab Code: LANCAS Case No.: Matrix: (soil/water) SOIL Sample wt/vol: 6.17 (g/mL) g Level: (low/med) LOW Moisture: not dec. 12 GC Column: DB-624 ID: 0.25 (mm) Soil Extract Volume: (uL) CAS NO. COMPOUND		/06jan: 6 6 (u :		! ! j26s04.d
! 100-42-5Styrene ! 75-25-2Bromoform ! 79-34-51,1,2,2-Tetra ! page 2 of 2	chloroethane	0.9 0.9 0.9	! U	! ! ! !





Page 6 of 11

1B		PA SAMI	PLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET			,
	:	CO1 4	
	!	6014-	4
Lab Name: Lancaster Laboratories Contract:	!_		!
Lab Code: LANCAS	SDG	No.:_	
Matrix: (soil/water) SOIL Lab Sa	mple ID:	469256	7
	le ID: hb	064.d	
Level: (low/med) LOW Date R	eceived:	01/20,	/06
	xtracted:	01/23	/06
	nalyzed:	02/07	/06
Concentrated Exerget (Stame, 1)	on Factor:		
Thjection volume. 2 (as)	ction: Sor		
GPC Cleanup: (Y/N) Y pH: Extra CONCENTRATION UNIT			
(****)	_	Q	
CAS NO. COMPOUND (ug/E or ug/kg) ML	2 00, 110	-	
! 108-95-2 Phenol !	38	! U	!
! 111-44-4 bis(2-Chloroethyl)ether !	38	! U	<u> </u>
! 95-57-8 2-Chlorophenol!	38	! U	!
! 541-73-1 1,3-Dichlorobenzene !	38	! U	į
! 106-46-7 1,4-Dichlorobenzene !	38	i U	ŗ
	38	. Ŭ	i
! 95-50-1 1,2-Dichlorobenzene	38	. U	•
! 95-48-7 2-Methylphenol	38	! U	i
! 108-60-1 2,2'-oxybis(1-Chloropropane)!			
! 106-44-5 4-Methylphenol	38		
! 621-64-7 N-Nitroso-di-n-propylamine	38	! U	
! 67-72-1 Hexachloroethane	38	! 0	:
! 98-95-3 Nitrobenzene	38	! 0	:
! 78-59-1 Isophorone	38	! U	!
! 88-75-5 2-Nitrophenol	38		1
! 105-67-9 2,4-Dimethylphenol	76		!
! 111-91-1 bis(2-Chloroethoxy)methane	! 38		į
! 120-83-2 2,4-Dichlorophenol	! 38	! Ū	!
! 120-82-1 1,2,4-Trichlorobenzene	! 38	! 0	!
1 91-20-3 Naphthalene	. 38	! 0	!
! 106-47-8 4-Chloroaniline	150	! U	!
! 87-68-3 Hexachlorobutadiene	. 38	i u	j
! 59-50-7 4-Chloro-3-methylphenol	1 38	i n	į.
! 91-57-6 2-Methylnaphthalene	! 38	! U	<u>!</u>
! 77-47-4 Hexachlorocyclopentadiene	. 76	! U	1
! 88-06-2 2,4,6-Trichlorophenol	! 38	! U	1
95-95-4 2,4,5-Trichlorophenol	. 38	! U	ţ
91-58-7 2-Chloronaphthalene	! 38	! U	į.
! 88-74-4 2-Nitroaniline	1 38	! U	!
! 131-11-3 Dimethylphthalate	! 38	! U	!
! 606-20-2 2,6-Dinitrotoluene	! 38	! U	1
: 000-20-2 2,0-biniciocotache	!	!	į.
FORM I SV-1			LM03.0

8844





Page 7 of 11

1c		EPA SAM	PLE N
SEMIVOLATILE ORGANICS ANALYSIS DATA SHE	ET		
	1		
	!	6014-	
ab Name: Lancaster Laboratories Contract:	<u>!</u>		
ab Code: LANCAS Case No.: SAS No.:	ŞDO	G No.:	
atrix: (soil/water) SOIL Lab	Sample ID:	469256	7
	File ID: hl	064.d	
•	Received:		/06
	Extracted:		
	Analyzed:		
	tion Factor:		, 00
	raction: Sor	1C	
CONCENTRATION UN			
CAS NO. COMPOUND (ug/L or ug/Kg) I	MDL UG/KG	Q	
! 208-96-8 Acenaphthylene	! 38	! ប	!
! 99-09-2 3-Nitroaniline	_! 76	! 0	!
! 83-32-9 Acenaphthene	! 38	! U	!
! 51-28-5 2,4-Dinitrophenol	! 190	! 🖰	!
! 100-02-7 4-Nitrophenol	! 38	! U	!
! 132-64-9 Dibenzofuran		! U	!
! 121-14-2 2,4-Dinitrotoluene	! 38	! ប	!
! 84-66-2 Diethylphthalate	! 38	! U	!
! 7005-72-3 4-Chlorophenyl-phenylether	! 38	! U	ì
! 86-73-7 Fluorene	! 38	! Ü	i
! 100-01-6 4-Nitroaniline	-! 76	. U	i
! 534-52-1 4,6-Dinitro-2-methylphenol	_! 70 _! 38	. U	
! 86-30-6 N-Nitrosodiphenylamine	_: 38 ! 38	! 0	;
			:
! 101-55-3 4-Bromophenyl-phenylether	_! 38	! 0	:
! 118-74-1 Hexachlorobenzene	_! 38		!
! 87-86-5 Pentachlorophenol	_! 190		!
! 85-01-8 Phenanthrene	_! 38	! U	į
! 120-12-7 Anthracene	_! 38	! U	į
! 86-74-8 Carbazole	_! 38	! U	!
! 84-74-2 Di-n-butylphthalate	_! 76	ţ Ţ	į
! 206-44-0 Fluoranthene	_! 38	! U	!
! 129-00-0 Pyrene	<u>.</u> ! 38	! ΰ	!
! 85-68-7 Butylbenzylphthalate	į 38	; U	!
! 91-94-1 3,3'-Dichlorobenzidine	! 76	! Ü	!
! 56-55-3 Benzo(a) anthracene	·! 38	! U	į
! 117-81-7 bis(2-Ethylhexyl)phthalate	1 38	! 0	!
! 218-01-9 Chrysene	. 38	! U	į
! 117-84-0 Di-n-octylphthalate	! 38	! U	į
! 205-99-2 Benzo(b) fluoranthene	-! ! 38	. U	1
! 207-08-9 Benzo(k) fluoranthene	! 38	. U	i
; ZU; TOD J = DENZO(K) LINULANCHENE			-



Analysis Report



Page 8 of 11

1C co SEMIVOLATILE ORGANICS ANA		E	PA SAM	PLE NO.
		1		!
		ļ.	6014-	!
Lab Name: Lancaster Laboratories	Contract:	ļ.		!
Lab Code: LANCAS Case No.:	SAS No.:	SDG	No.:	
Matrix: (soil/water) SOIL	Lab Samp	ole ID:	46925 <u>6</u>	7
Sample wt/vol: 30 (g/mL) G	Lab File	ID: hb	064.d	
Level: (low/med) LOW	Date Red	eived:	01/20	/06
% Moisture: not dec: 12 dec:	Date Ext	racted:	01/23	/06
Concentrated Extract Volume: 500 (ıL) Date Ana	lyzed:	02/07	/06
Injection Volume: 2 (uL)	Dilution	Factor:	1.0	
GPC Cleanup: (Y/N) Y pH:	Extract	ion: Son	0	
co	NCENTRATION UNITS:			
CAS NO. COMPOUND {u	g/L or ug/Kg) MDL	UG/KG	Q	
! 50-32-8 Benzo(a)pyrene	!	38	! U	_!
! 193-39-5 Indeno(1,2,3-cd	pyrene!	38	! U	į
! 53-70-3 Dibenz(a,h)anth	racene !	38	! U	ļ.
! 191-24-2 Benzo(g,h,i)per	ylene !	38	! U	į.
!	!!			!
FORM I SV-3			0	LM03.0





Page 9 of 11

ORGANICS ANALYSIS DA	
Lab Name:Lancaster Laboratories Contract	: ! 6014-
Lab Code: Case No.: SAS No.	: SDG No.: PNV88
Matrix: (soil/water) SOIL	Lab Sample ID: 4692567
Sample wt/vol: 30 (g/mL) g	Lab File ID: 401353.56R
% Moisture: 12 decanted: (Y/N)N	Date Received: 01/20/06
Extraction: (SepF/Cont/Sonc) SONC	Date Extracted: 01/25/06
Concentrated Extract Volume: 10000 (uL)	
Injection Volume: 1 (uL)	Dilution Factor: 1
GPC Cleanup: (Y/N) Y pH: 8	Sulfur Cleanup: (Y/N) N
GPC Creatup: (1/N) 1 pn. 6	Sullur Cleanup. (1/1)
CONCE	NTRATION UNITS:
	or ug/Kg) MDL ug/kg Q
CAS NO. COMPOUND (4971)	or aging, non aging Q
	!!!!
! 319-84-6alpha-BHC	! 0.19!0 !
! 58-89-9gamma-BHC (Lindane)	
! 319-85-7beta-BHC	0.19!0 !
! 319-86-8delta-BHC	. 0.19!0 !
! 76-44-8Heptachlor	! 0.19!0 !
! 309-00-2Aldrin	. 0.19!U !
! 1024-57-3Heptachlor epoxide	
! 5103-74-2gamma-Chlordane	
! 5103-71-9alpha-Chlordane	! 0.19!0 !
! 72-55-94,4'-DDE	! 0.38!0 !
959-98-8Endosulfan I	! 0.19!0 !
! 60-57-1Dieldrin	
! 72-20-8Endrin	! 0.38!U !
! 72-54-84,4'-DDD	! 0.50!U!
! 33213-65-9Endosulfan II	. 0.38!U !
! 50-29-34,4'-DDT	! 0.38!0 !
! 7421-93-4Endrin aldehyde	
! 72-43-5Methoxychlor	. 2.3!U !
! 1031-07-8Endosulfan sulfate	. 0.38!U !
! 53494-70-5Endrin ketone	! 0.38!U!
! 12674-11-2Aroclor-1016	
! 11104-28-2Aroclor-1221	19!U!
! 11141-16-5Aroclor-1232	. 30!U !
! 53469-21-9Aroclor-1242	9.9!0 !
! 12672-29-6Aroclor-1248	! 34!U!
! 11097-69-1Aroclor-1254	10!0 !
1 11096-92-5	i 9 1 III !

10

FORM I

OLM03.0

9.1!0

25!U

EPA SAMPLE NO.



! 11096-82-5----Aroclor-1260

! 8001-35-2----Toxaphene_



Page 10 of 11

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS ! 6014-Lab Name: Lancaster Laboratories Contract:______
Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab Code: LANCAS Case No.: SAS No.: SDG No.:

Matrix: (soil/water) SOIL

Sample wt/vol: 6.17 (g/mL) g

Lab File ID: HP07566.i/06jan26b.b/rj26s04.d

Level: (low/med) LOW

Date Received: 01/20/06

Moisture: pot dec. 12

Date Analyzed: 01/26/06

moisture: not dec. 12 Date Analyzed: 01/20/06
GC Column: DB-624 ID: 0.25 (mm)
Soil Extract Volume: _____ (uL)

CONCENSE Received: 01/20/06
Date Analyzed: 01/26/06
Dilution Factor: 1.0
Soil Aliquot Volume: _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 10

CAS NUMBER	COMPOUND NAME		EST. CONC.	
	== =================================	! 2,34 !	270	! J
2. 78-78-4		! 2.84 !	53	! NJ
3. 109-66-0	!Pentane	! 3.14 !	34	! NJ
4.	!Unknown alkane	! 4.38 !	10	! J
5.	!Unknown alkane	! 4.77 !	6	! J
6. 110-54-3		! 5.20 !	13	! NJ
6. 110-54-5 7.	!Unknown alicyclic	! 6.11 !	6	! J
		! 7.05 !		! J
8. 9. 108-87-2	•	! 8.58 !		! NJ
	!Unknown siloxane	! 12.35 !		! J B
10.		1		!
11	!	—;——;		!
12	!	—-;——- <u>;</u>		!
13		i		!
14		—-;—;		!
15		i		!
16		;- 		ļ.
1/		—-;——-;		!
18		—;——-;		!
19		ii		!
20		—-i——-		!
21		—-;——-;		1
22		—-;——-	·	!
23		<u>;</u>	· · · · · · · · · · · · · · · · · · ·	!
24		i	` 	!
		;		- i
26			; 	·
27		—- <u>;</u>	`	- <u>i</u> — — —
28	!		; 	-;
29	<u></u>	—- <u>;</u> ———	·	-i
30	!		i	-;
	!	!	·	- '

FORM I VOA-TIC

OLM03.0

EPA SAMPLE NO.

MEMBER



Page 11 of 11

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS 16014-Lab Name: Lancaster Laboratories Contract: ! Lab Code: LANCAS Case No.: SAS No.: SDG !

Lab Code: LANCAS Case No.: SAS No.: SUG NO.: Lab Sample ID: 4692567

Sample wt/vol: 30 (g/mL) g Lab File ID: hb064.d

Level: (low/med) LOW Date Received: 01/20/06

% Moisture: 12 Decanted: (Y/N) Date Extracted: 01/23/06

Concentrated Extract Volume: 500 (uL) Date Analyzed: 02/07/06

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: Y PH: Extraction: Sonc

Number TICs found: 19 CONCENTRATION Up (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	!	***	EST. CONC.	
	==!===================================	•	14.896		. J
1.	! Unknown		16.092		! J
2.	! Unknown		18.021		! J
3.	! Unknown		18.506		! J
4. 5.	!Unknown		19.080		! J
5. 6.	! Unknown		19.942		! J
7.	!Unknown		20.805		! J
8.	! Unknown		22.491		! J
8. 9.	!Unknown		23.404		! J
9. 10.	!Unknown	į	23.692	110	! J
10.	!Unknown		24.982	100	! J
12.	!Unknown	į	25.261		! J B
13.	!Unknown	į	26.424	110	! J
14.	!Unknown		27.579	91	! J
15.	! Unknown	į	28.504	100	! J
16.	! Unknown	•	30.508	94	! J
17.	! Unknown	į	30.748	9 350	! J
18.	!Unknown		32.484		! J B
	! Unknown	•	47.400		! J
19.	Olikhowii	1		1	!
20		——- <u>i</u>		!	!
21				!	!
22		;		1	!
23		;		!	!
24	 ;			į	!
25				!	1
26				!	!
27	—; —————			!	!
28	<u>-</u>			!	1
29				!	!
30				1	`r

page 1 of 1 FORM I SV-1

OLM03.0

EPA SAMPLE NO.





Page 1 of 12

Lancaster Laboratories Sample No. SW 4692568

TIE023:6007:S010030 Soil Sample

Painesville, OH

Collected:01/19/2006 11:55

by MT

Account Number: 06101

Submitted: 01/20/2006 09:00

Reported: 02/16/2006 at 00:55

Discard: 03/03/2006

PO Box 1487

Painesville OH 44077

Tierra Solutions, Inc.

Discard: 05/05/2000

6007- SDG#: PNV88-04

				pry		
CAT			Dry	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00383	TOC by Lloyd Kahn	n.a.	N.D.	220.	mg/kg	1
	The quantitation limit for total	l organic carb	on was increase	ed		
	due to the nature of the sample					
01353	Moisture	n.a.	11.4	0.50	8	1
01441	рн	n.a.	7.57	0.0100	Std. Units	1
	The pH of the method blank (bac	kground soil)	analyzed with	the sample was 7.0	6.	
	The pH was performed on a 1:1 s	lurry (50 gm c	f sample and 50	ml C		
	of deionized water) after being					
05892	Hexavalent Chromium by IC	18540-29-9	N.D.	0.23	mg/kg	1
07552	ORP Observed	n.a.	120.	1.0	mV	1
3.202	The ORP reported is the observeduring the analysis.	d potential of	the platinum	electrode used		

07157 OLM03.2 Volatiles in Soils

A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

O7125 SVOA Library Search OLM03.2

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form. An "X" indicates an isomer of the listed compound.

07126 VOA Library - Search OLM03.2

The results from the volatile library search are listed on the attached
FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined
on the back of this form.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.





Page 2 of 12

Lancaster Laboratories Sample No. SW 4692568

TIE023:6007:S010030 Soil Sample

Painesville, OH

Collected:01/19/2006 11:55

by MT

Account Number: 06101

Submitted: 01/20/2006 09:00

Reported: 02/16/2006 at 00:55

PO Box 1487

Discard: 03/03/2006

Painesville OH 44077

Tierra Solutions, Inc.

6007- SDG#: PNV88-04

Laboratory Chronicle

Laboratory Chronicle						Dilution	
CAT			Analysis				
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor	
00159	Mercury	SOW ILM04.0	1	01/30/2006 12:05	Damary Valentin	1	
01643	Aluminum	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
01650	Calcium	SOW ILM04.0	1	01/31/2006 08:30	Joann e M Gates	1	
01654	Iron	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
01657	Magnesium	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
01662	Potassium	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
01667	Sodium	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
06925	Thallium	SOW ILM04.0	1	02/08/2006 13:13	Joanne M Gates	1	
06935	Arsenic	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
06936	Selenium	SOW ILM04.0	2	02/08/2006 13:13	Joanne M Gates	1	
06944	Antimony	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
06946	Barium	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
06947	Beryllium	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
06949	Cadmium	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
06951	Chromium	SOW ILMO4.0	1	01/31/2006 08:30	Joanne M Gates	1	
06952	Cobalt	SOW ILMO4.0	1	01/31/2006 08:30	Joanne M Gates	1	
06952		SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
06955	Copper Lead	SOW ILM04.0	2	02/08/2006 13:13	Joanne M Gates	1	
06953	Manganese	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
06956	Nickel	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
06966	Silver	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
06971	Vanadium	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
06971	Zinc	SOW ILM04.0	1	01/31/2006 08:30	Joanne M Gates	1	
00383	TOC by Lloyd Kahn	Lloyd Kahn modified	1	02/02/2006 12:29	James S Mathiot	1	
01353	Moisture	SOW OLMO3.2	1	01/24/2006 16:56	Scott W Freisher	1	
		SOW OLMO4.3	1	01/24/2006 18:30	Luz M Groff	1	
01441	pH Hexavalent Chromium by IC	SW-846 7199	1	01/25/2006 11:22	William L Hamaker Jr	1	
05892	Total Cyanide CLP (solid)	SOW ILM04.0	1	01/27/2006 17:42	Venia B McFadden	1	
05910		ASTM D1498	1	01/30/2006 08:30	Michelle L Heidig	1	
07552	ORP Observed OLM03.2	SOW OLMO3.2	1	01/31/2006 19:02	Richard A Shober	1	
04562	Pesticides/PCBs/Soil	Bon 02.12	_				
04438	OLM03.2 Semivolatiles/Soil	SOW OLM03.2	1	02/07/2006 02:08	Linda M Hartenstine	1	
07157	OLMO3.2 Volatiles in Soils	SOW OLM03.2	1	01/26/2006 20:54	Jason M Long	0.82	
00494	SW CLP Hg Digest	SOW ILMO4.0	1	01/29/2006 23:15	Annamaria Stipkovits	i 1	
01849	SW CLP My Digest	SOW ILMO4.0	1	01/29/2006 20:50	Annamaria Stipkovits	i 1	
	CLP Soil Extraction	SOW OLM03.2	1	01/25/2006 07:00	Danette S Cavalier	1	
04185 04607	CLP Soil Extraction	SOW OLM03.2	1	01/23/2006 05:00	Mark P Mastropietro	1	
	CLP Cyanide Solid	SOW ILM04.0	1	01/25/2006 11:40	Choon Y Tian	1	
05909	Distillation	55 III	-				
07578	GC/MS-HL Encore Prep-NC	sw-846 5035	1	01/20/2006 16:03	Justin M Bowers	n.a.	
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	01/24/2006 22:15	Daniel S Smith	1	
01023	HEVGAGTERS OF (PVCTGCCTOR)	5 5.0 0					





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Lancaster Laboratories Sample No. SW 4692568

TIE023:6007:S010030 Soil Sample Painesville, OH

Collected:01/19/2006 11:55

by MT

Account Number: 06101

Submitted: 01/20/2006 09:00 Reported: 02/16/2006 at 00:55

Discard: 03/03/2006

Tierra Solutions, Inc.

PO Box 1487

Painesville OH 44077

SDG#: PNV88-04 6007-

08389 GC/MS - LL Encore Prep SW-846 5035 08389 GC/MS - LL Encore Prep SW-846 5035

01/20/2006 16:14 01/20/2006 16:15

Justin M Bowers Justin M Bowers

n.a.



Page 4 of 12

	oncentration	6 Units (ug.	/L or mg/kg dry	D	ate R	mple eceiv	OG No.: PNV88 ID: 4692568 red: 01/20/06
	CAS No.	 Analyte	 Concentration	IC I	Q	 M	
		l		l_I		_!!	
	7429-90-5	Aluminum	10700	_		_ P_	
	7440-36-0	Antimony_				_ P_	
	7440-38-2	Arsenic	12.4	_	_N	_ P_	
	7440-39 - 3	Barium	I71.2I			_ P_	
	7440-41-7	Beryllium				_ P_	
	7440-43-9	Cadmium	0.15			_ P_	
	7440-70-2	Calcium	23300			_ P_	
	7440-47-3 <u></u>	[Chromium_		_		_ P_	
	⁻ 7440-48-4 <u>-</u>	Cobalt	12.8	ا_ا		_ P_	•
	⁻ 7440-50-8	Copper	l25.1	{_ }		_ P_	
	7439-89-6	Iron	30900	ا_ا		_ P_	Í
	7439-92-1	Lead	14.9	ا_ا		_ P_	
	⁻ 7439-95-4	Magnesium	J9180	ا_ا	_*	_ P_	•
	7439-96-5	Manganese	I369	ا_ا		_ P_	İ
	7439-97-6	Mercury_	0.022	U		_tcv	İ
	7440-02-0		32.2	1_1		_ P_	
	7440-09-7	Potassium	2020	1_1		P	t
	7782-49-2	Selenium_	0.96	U		_ P	1
	7440-22-4	Silver	0.28	B		_ P_	1
	7440-23-5	Sodium	190	B		_ P_	l
	i 7440-28-0		2.1	U		_ P_	I
	7440-62-2 <u> </u>	Vanadium	15.2	1_1	l	_ P_	I
	7440-66-6	Zinc	73.0	$I_{-}I$	l	_ P_	\$
		Cyanide	0.22	וּטו	l	_ CA	ì
	i	1		1_1	ا	I	1
lor Before:	BROWN	Clari	ty Before:			T	exture: MEDIUM
lor After:		Clari	ty After:		_	A:	rtifacts:
omments:							





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EPA SAMPLE NO. VOLATILE ORGANICS ANALYSIS DATA SHEET 6007-Contract:____ Lab Name: Lancaster Laboratories Lab Code: LANCAS Case No.: SAS No.:

Matrix: (soil/water) SOIL Lab Sample ID: 4692568 SDG No.: Sample wt/vol: 6.08 (g/mL) g Lab File ID: HP07566.i/06jan26b.b/rj26s05.d Level: (low/med) LOW Date Received: 01/20/06 Moisture: not dec. 11
GC Column: DB-624 ID: 0.25 (mm)
Soil Extract Volume: (uL)

Date Analyzed: 01/26/06
Dilution Factor: 1.0
Soil Aliquot Volume: CAS NO. COMPOUND (ug/L or ug/Kg) MDL ug/Kg ! 74-87-3-----Chloromethane 2 ! U ! 75-01-4-----Vinyl Chloride ! 0 ! 74-83-9-----Bromomethane 3 ! U ! 75-00-3-----Chloroethane 3 ! U ! 75-35-4-----1,1-Dichloroethene 2 ! U ! 67-64-1-----Acetone ! 75-15-0-----Carbon Disulfide ! 75-09-2----Methylene Chloride ! 75-34-3-----1,1-Dichloroethane 0.9 ! U 540-59-0----1,2-Dichloroethene (Total) 1 78-93-3-----2-Butanone 6 ! U ! 67-66-3-----Chloroform 0.9 ! ប ! 71-55-6----1,1,1-Trichloroethane 0.9 ! U ! 56-23-5-----Carbon Tetrachloride 0.9 ! U ! 71-43-2----Benzene 0.9 ! 0 ! 107-06-2----1,2-Dichloroethane 2 ! U ! 79-01-6-----Trichloroethene 0.9 ! U ! 78-87-5-----1,2-Dichloropropane 3 1 11 ! 75-27-4-----Bromodichloromethane 2 ! U ! 10061-01-5----cis-1,3-Dichloropropene 0.9 ± 0 ! 108-10-1------4-Methyl-2-Pentanone 3 ! U ! 108-88-3----Toluene 2 ! J 0.9 ! 0 ! 10061-02-6----trans-1,3-Dichloropropene ! 79-00-5-----1,1,2-Trichloroethane 2 ! U 0.9 ! U ! 127-18-4----Tetrachloroethene ! 591-78-6----2-Hexanone ! [] ! 124-48-1-----Dibromochloromethane 0.9 ! U ! 108-90-7------Chlorobenzene 0.9 ! U ! 100-41-4----Ethylbenzene 0.9 . ! U ! 1330-20-7-----Xylene (Total) 0.9 ! 0 page 1 of 2 FORM I VOA OLM03.0



Analysis Report



Page 6 of 12

1A	ΕP	A SAMPI	E NO.
VOLATILE ORGANICS ANALYSIS DATA SHEET	. —		 -
	!	5007	!
	!	6007-	!
Lab Name: Lancaster Laboratories Contract:	!		;
Lab Code: LANCAS	SDG	No.:	
Matrix: (soil/water) SOIL Lab Sample ID: 4692568			
Sample wt/vol: 6.08 (g/mL) g Lab File ID: HP07566.i		26b.b/1	cj26s05.d
Level: (low/med) LOW Date Received: 01/20/0			
Moisture: not dec. 11 Date Analyzed: 01/26/0	6		
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0			
Soil Extract Volume: (uL) Soil Aliquot Volume: CONCENTRATION UNITS		L)	
CAS NO. COMPOUND (ug/L or ug/Kg) MDL u	g/Kg	Q	
! 100-42-5Styrene !	0.9	! U	_!
! 75-25-2Bromoform	0.9	! U	!
! 79-34-51,1,2,2-Tetrachloroethane !	0.9	! U	!
		_!	_!
page 2 of 2 FORM I VOA		OLMO:	3.0





Page 7 of 12

18	EPA SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET	
	! !
	! 6007- !
Lab Name: Lancaster Laboratories Contract:	t
Lab Code: LANCAS Case No.: SAS No.:	SDG No.:
	nple ID: 4692568
Sample wt/vol: 30 (g/mL) G Lab Fi	le ID: hb065.d
Level: (low/med) LOW Date R	eceived: 01/20/06
	tracted: 01/23/06
Concentrated Extract Volume: 500 (uL) Date A	nalyzed: 02/07/06
	on Factor: 1.0
	ction: Sonc
CONCENTRATION UNIT	S:
CAS NO. COMPOUND (ug/L or ug/Kg) MD	L UG/KG Q
! 108-95-2 Phenol !	37 ! ប !
! 111-44-4 bis(2-Chloroethyl)ether !	37 ! U !
! 95-57-8 2-Chlorophenol!	37 ! U !
! 541-73-1 1,3-Dichlorobenzene !	37 ! U !
! 106-46-7 1,4-Dichlorobenzene!	37 ! U!
! 95-50-1 1,2-Dichlorobenzene!	37 ! U !
95-48-7 2-Methylphenol!	37 ! U !
! 108-60-1 2,2'-oxybis(1-Chloropropane)!	! ט! 37
! 106-44-5 4-Methylphenol!	37 ! ប !
! 621-64-7 N-Nitroso-di-n-propylamine!	37 ! ប !
! 67-72-1 Hexachloroethane!	37 ! U!
! 98-95-3 Nitrobenzene!	37 ! U !
! 78-59-1	37 ! U !
! 88-75-5 2-Nitrophenol!	! ט! 37
! 105-67-9 2,4-Dimethylphenol!	75 ! Ü !
! 111-91-1 bis(2-Chloroethoxy)methane !	37 ! Ü!
! 120-83-2 2,4-Dichlorophenol!	37 ! U !
! 120-82-1 1,2,4-Trichlorobenzene!	37 ! U !
! 91-20-3 Naphthalene!	37 ! U !
! 106-47-8 4-Chloroaniline!	150 ! 0 !
! 87-68-3 Hexachlorobutadiene!	37 ! U !
! 59-50-7 4-Chloro-3-methylphenol!	37 ! U !
! 91-57-6 2-Methylnaphthalene!	37 ! U !
! 77-47-4 Hexachlorocyclopentadiene!	75 ! 0 !
! 88-06-2 2,4,6-Trichlorophenol!	37 ! U !
! 95-95-4 2,4,5-Trichlorophenol !	37 ! U !
! 91-58-7 2-Chloronaphthalene!	37 ! U !
! 88-74-4 2-Nitroaniline!	37 ! U !
! 131-11-3 Dimethylphthalate!	37 ! U !
! 606-20-2 2,6-Dinitrotoluene!	37 ! U !
!	1!
FORM I SV-1	OLM03.0



EDA CAMPLE NO



Page 8 of 12

1C	EPA SAMPLE I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHE	ET
	!
	! 6007-
ab Name: Lancaster Laboratories Contract:	
ab Code: LANCAS	SDG No.:
	Sample ID: 4692568
ample wt/vol: 30 (g/mL) G Lab	File ID: hb065.d
0.07, (20., 100-) 20	Received: 01/20/06
	Extracted: 01/23/06
oncentrated Extract Volume: 500 (uL) Date	Analyzed: 02/07/06
njection Volume: 2 (uL) Dilu	tion Factor: 1.0
PC Cleanup: (Y/N) Y pH: Ext	raction: Sonc
CONCENTRATION UN	ITS:
CAS NO. COMPOUND (ug/L or ug/Kg)	MDL UG/KG Q
! 208-96-8 Acenaphthylene	_! 37 ! U !
! 99-09-2 3-Nitroaniline	_! יי 75! יי !
! 83-32-9 Acenaphthene	_! 37 ! U !
! 51-28-5 2,4-Dinitrophenol	_! 190 ! U !
! 100-02-7 4-Nitrophenol	_! 37 ! U !
! 132-64-9 Dibenzofuran	_! 37 ! U !
! 121-14-2 2,4-Dinitrotoluene	ַ! ז ! 37 ! נ
! 84-66-2 Diethylphthalate	_! 37 ! U !
! 7005-72-3 4-Chlorophenyl-phenylether_	_! 37 ! U !
! 86-73-7 Fluorene	_! זי! 37
! 100-01-6 4-Nitroaniline	. 75 ! U !
! 534-52-1 4,6-Dinitro-2-methylphenol	[! 37 ! U !
! 86-30-6 N-Nitrosodiphenylamine	[! 37 ! U !
! 101-55-3 4-Bromophenyl-phenylether	_! 37 ! U !
! 118-74-1 Hexachlorobenzene	. 37 ! U !
! 87-86-5 Pentachlorophenol	. י 190 ! ט !
! 85-01-8 Phenanthrene	. 44 ! J !
! 120-12-7 Anthracene	. 37 ! U !
! 86-74-8 Carbazole	[! 37 ! U!
! 84-74-2 Di-n-butylphthalate	[! 75 ! U !
! 206-44-0 Fluoranthene	[! 37 ! U !
! 129-00-0 Pyrene	! 37 ! U !
! 85-68-7 Butylbenzylphthalate	! זי! 37 ! <u>י</u>
! 91-94-1 3,3'-Dichlorobenzidine	_! יט! 75!!!
! 56-55-3 Benzo(a)anthracene	_! יי 17 !!!
! 117-81-7 bis(2-Ethylhexyl)phthalate	_! ט! 37 ! <u>י</u> !
! 218-01-9 Chrysene	_! 37 ! U !
! 117-84-0 Di-n-octylphthalate	_! 37 ! U !
! 205-99-2 Benzo(b) fluoranthene	! 37 ! U !
! 207-08-9 Benzo(k) fluoranthene	_! 37 ! U !
1	<u> </u>



Analysis Report



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10	C cont		E	PA SAM	IPLE NO.
SEMIVOLATILE ORGANICS	ANALYSIS DATA S	SHEET			
			!	6007-	. !
Lab Name: Lancaster Laboratories	Contract	! <u></u>	. !_		<u> </u>
Lab Code: LANCAS Case No.:_	SAS No.	:	SDG	No.:_	
Matrix: (soil/water) SOIL	La	b Samp	le ID:	469256	8
Sample wt/vol: 30 (g/mL) G	La	ab File	ID: hb	065.d	
Level: (low/med) LOW	Da	ite Rec	:eived:	01/20	/06
% Moisture: not dec: 11 dec:	Da	ite Ext	racted:	01/23	706
Concentrated Extract Volume: 500	(uL) Da	ite Ana	lyzed:	02/07	/06
Injection Volume: 2 (uL)	D:	lution	Factor:	1.0	
GPC Cleanup: (Y/N) Y pH:	1	Extract	ion: Son	С	
•	CONCENTRATION	UNITS:			
CAS NO. COMPOUND	(ug/L or ug/K) MDL	UG/KG	Q	
50-32-8 Benzo(a)pyre	ene	ļ	37	! Ü	<u> </u>
193-39-5 Indeno(1,2,3	3-cd)pyrene	<u> </u>	37	! U	1
! 53-70-3 Dibenz(a,h)a	anthracene	· !	37	i n	!
! 191-24-2 Benzo(g,h,i))perylene	<u> </u>	37	! U	ţ
		!		_!	<u>.</u> !
FORM I S	sv-3			C	DIM03.0





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		10		EPA SAMPLE NO) .
	ORGANICS	ANALYSIS DATA	SHEET		
Lab Name:Lancaster	Laboratories	Contract:	! ! !	6007-	! !
Lab Code:	Case No.:	SAS No.:	SDG No	.: PNV88	-
Matrix: (soil/wate:	r) SOIL	L	ab Sample ID:	4692568	
Sample wt/vol:	30 (g/mL)	g L	ab File ID: 4D1	353.57R	
% Moisture: 11	decanted: (Y	/N)N D	ate Received:	01/20/06	
Extraction: (SepF,	/Cont/Sonc)		ate Extracted:		
Concentrated Extra	ct Volume:	10000 (uL) D	ate Analyzed:	01/31/06	
Injection Volume:	1 (uL)	D	ilution Factor:	1	
GPC Cleanup: (Y/)	N) Y pH:	8 S	ulfur Cleanup:	(Y/N) N	

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) MDL ug/kg Q

		<u> </u>	
!	!	!	İ
!	319-84-6alpha-BHC!	0.19!U	!
	58-89-9gamma-BHC (Lindane)!	0.19!υ	į
!	319-85-7beta-BHC!	0.27!JP	ļ
!	319-86-8delta-BHC!	0.19!ប	ļ
!	76-44-8Heptachlor!	0.19!ប	ļ
!	309-00-2Aldrin !	0.19!U	į
!		0.19!U	į
!	5103-74-2gamma-Chlordane!	0.19!U	į
!		0.19!U	į
!	72-55-94,4'-DDE	0.37!U	ţ
ļ	959-98-8Endosulfan I	0.19!U	Ī
!	60-57-1Dieldrin	0.37!บ	ţ
ļ	72-20-8Endrin	0.37!U	!
ļ	72-54-84, 4'-DDD	0.49!U	!
į	33213-65-9Endosulfan II	0.37!U	!
ļ	50-29-34,4'-DDT	0.37!U	!
ţ	7421-93-4Endrin aldehyde	0.75!ປ	!
!	72-43-5Methoxychlor !	2. 2 !U	ļ
!	1031-07-8Endosulfan sulfate	0.37!U	!
!	53494-70-5Endrin ketone	0.37!ΰ	1
ţ	12674-11-2Aroclor-1016	26!0	1
!	11104-28-2Aroclor-1221	19!U	į
į	11141-16-5Aroclor-1232	39!0	!
!	53469-21-9Aroclor-1242	9.8!0	!
!	12672-29-6Aroclor-1248	27!U	ļ
!	11097-69-1Aroclor-1254	10!ប	į
!	11096-82-5Aroclor-1260	9.0!0	!
!	8001-35-2Toxaphene	19!U	!
!	<u>-</u>	<u></u>	ţ

FORM I OLM03.0





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3 E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

6007~ Contract:_____ SAS No.:____

EPA SAMPLE NO.

Lab Name: Lancaster Laboratories

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME		EST. CONC.	
	= ! ==================================	! 2.34 !	29 0	! ===
1. 2. 78-78-4		! 2.85 !		! NJ
3. 109-66-0		! 3.14 !		! NJ
	!Pentane, 2-methyl-	4.40 !	11	! NJ
5.	!Unknown aliphatic	! 4.79 !	_	! J
6. 110-54-3	•	! 5.20 !	10	! NJ
	!Cyclopentane, methyl-	! 6.10 !		! NJ
	!Cyclohexane	! 7.04 !	7	! NJ
9.	!Unknown siloxane	! 12.34 !	6	! Ј В
	• • • • • • • • • • • • • • • • • • • •	į į		!
10	_; 			!
11		!!		!
12 13	i	! - !		!
14		! !		.!
15		!!		!
16		!		.!
17		!!		!
18.	_1	!!		.!
19	1	!!		.!
20.		!!		!
21	<u> </u>	!!		_!
22	!	!!		.!
23	!	!!		.!
24		!!		. <u>!</u>
25		!!		-!
26	!	!!		-!
27	1	!!		-!
28	!	!		-!
29.		!		-!
30		!		-!
	!	!		_ :





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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

16007-Lab Name: Lancaster Laboratories Contract: Lab Code: LANCAS Case No.: SAS No.:

SDG No.:_ Lab Sample ID: 4692568 Lab File ID: hb065.d Date Received: 01/20/06 Matrix: (soil/water) SOIL Sample wt/vol: 30 (g/mL) g

Sample wt/vol: 30 (g/mL) g

Level: (low/med) LOW
% Moisture: 11 Decanted: (Y/N) Date Extracted: 01/23/06
Concentrated Extract Volume: 500 (uL) Date Analyzed: 02/07/06
Injection Volume: 2 (uL) Dilution Factor: 1
GPC Cleanup: Y

PH:

CONCENTRATION UNITS:

CONCENTRATION UN
Number TICs found: 24 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	! COMPOUND NAME	RT	EDI. CORC.	! ! Q !=======
	==!============! !Naphthalene, decahydro-, cis!			! J X
1.	! Unknown	14.889	120	! J
3.	!Naphthalene, decahydro-2-met!			! J X
4.	!Unknown	16.095	100	! J
. 4. ! 5.	! Unknown	18.025	! 180	! J
6.	! Unknown	19.075	! 110	! J
. 7.	Unknown	19.550	! 76	! J
. <i>/.</i> ! 8.	!Unknown	19.758	! 79	! J
9.	! Unknown	19.937	! 160	! J
! 10.	! Unknown	20.810	! 120	! J
! 11.	!Unknown	20.880	! 99	! J
! 12.	!Unknown	21.952	! 88	! J
12.	!Unknown	23.054	! 78	! J
111.	!Unknown	23.689	! 95	! J
: 14. ! 15.	!Unknown	24.981	! 76	! J
: 15. ! 16.	!Unknown	25.270	! 280	! J B
17.	! Unknown	26.424	! 110	! J
17.	!Unknown	27.579	! 110	! J
! 19.	! Unknown	1 28.505	! 120	! J
! 20.	! Unknown	28.604	! 76	! J
1 21.	Unknown	! 30.519	! 100	! J
. 21.	!Unknown Carboxylic Acid	9 30.748	! 180	! J B
. 22. ! 23.	!Unknown	92.485	! 90	! J B
. 23.	!Unknown	47.382	! 1800	! J
1 25.		!	!	.!
! 26.	1	!	!	!
. 20 ! 27.	!	!	.!	<u> !</u>
28	!	!	!	.!
29.	!	!	!	1
30.	!	!	!	.!
· • • • • • • • • • • • • • • • • • • •		!	!	!

page 1 of 1

FORM I SV-1

OLM03.0

EPA SAMPLE NO.

MEMBER



Page 1 of 12

Lancaster Laboratories Sample No. SW 4692569

TIE023:6024:S010030 Soil Sample

Painesville, OH

Collected:01/19/2006 09:45

by MT

Account Number: 06101

Submitted: 01/20/2006 09:00

Tierra Solutions, Inc. PO Box 1487

Reported: 02/16/2006 at 00:55

Discard: 03/03/2006

Painesville OH 44077

6024- SDG#: PNV88-05

				Dry		
CAT			Dry	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00383	TOC by Lloyd Kahn	n.a.	N.D.	230.	mg/kg	1
	The quantitation limit for total	al organic carb	oon was increas	sed		
	due to the nature of the sample					
01353	Moisture	n.a.	13.7	0.50	8	1
01441	рН	n.a.	7.75	0.0100	Std. Units	1
	The pH of the method blank (back	ckground soil)	analyzed with	the sample was 7.0	06.	
	The pH was performed on a 1:1					
	of deionized water) after being					
05892	Hexavalent Chromium by IC	18540-29-9	0.37 J	0.23	mg/kg	1
07552	ORP Observed	n.a.	116.	1.0	mV	1
	The ORP reported is the observe during the analysis.	ed potential or	f the platinum	electrode used		
07157	OLMO3.2 Volatiles in Soils					

07157 OLM03.2 Volatiles in Soils

A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

07125 SVOA Library Search OLM03.2

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form. An "X" indicates an isomer of the listed compound.

07126 VOA Library - Search OLM03.2

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

0862



Lancaster Laboratories, Inc. 2425 New Holland Pike PO Box 12425 Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681

Analysis Report



Page 2 of 12

Lancaster Laboratories Sample No. SW 4692569

TIE023:6024:S010030 Soil Sample

Painesville, OH

Collected:01/19/2006 09:45

by MT

Account Number: 06101

Tierra Solutions, Inc.

Submitted: 01/20/2006 09:00

PO Box 1487

Reported: 02/16/2006 at 00:55

Discard: 03/03/2006

Painesville OH 44077

6024- SDG#: PNV88-05

Laboratory Chronicle

		парогатогу	CIII O.			
CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00159	Mercury	SOW ILM04.0	ì	01/30/2006 12:07	Damary Valentin	1
01643	Aluminum	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
01650	Calcium	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
01654	Iron	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
01657	Magnesium	SOW ILMO4.0	1	01/31/2006 08:34	Joanne M Gates	1
01662	Potassium	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
01667	Sodium	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
06925	Thallium	SOW ILM04.0	1	02/08/2006 13:17	Joanne M Gates	1
06935	Arsenic	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
06936	Selenium	SOW ILMO4.0	2	02/08/2006 13:17	Joanne M Gates	1
06944	Antimony	SOW ILMO4.0	1	01/31/2006 08:34	Joanne M Gates	1
06946	Barium	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
06947	Beryllium	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
06949	Cadmium	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
06951	Chromium	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
06952	Cobalt	SOW ILMO4.0	1	01/31/2006 08:34	Joanne M Gates	1
06953	Copper	SOW ILMO4.0	1	01/31/2006 08:34	Joanne M Gates	1
06955	Lead	SOW ILM04.0	2	02/08/2006 13:17	Joanne M Gates	1
06958	Manganese	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
06961	Nickel	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
06966	Silver	SOW ILMO4.0	1	01/31/2006 08:34	Joanne M Gates	1
06971	Vanadium	SOW ILM04.0	1	01/31/2006 08:34	Joanne M Gates	1
06972	Zinc	SOW ILMO4.0	1	01/31/2006 08:34	Joanne M Gates	1
00383	TOC by Lloyd Kahn	Lloyd Kahn modified	1	02/02/2006 12:38	James S Mathiot	1
01353	Moisture	SOW OLMO3.2	1	01/24/2006 16:56	Scott W Freisher	1
01441	Hq	SOW OLMO4.3	1	01/24/2006 18:30	Luz M Groff	1
05892	Hexavalent Chromium by IC	SW-846 7199	1	01/25/2006 13:55	William L Hamaker Jr	1
05910	Total Cyanide CLP (solid)	SOW ILM04.0	1	01/27/2006 17:43	Venia B McFadden	1
07552	ORP Observed	ASTM D1498	1	01/30/2006 08:30	Michelle L Heidig	1
04562	OLM03.2	SOW OLM03.2	1	01/31/2006 19:32	Richard A Shober	1
	Pesticides/PCBs/Soil					
04438	OLM03.2 Semivolatiles/Soil	SOW OLM03.2	1	02/07/2006 03:11	Linda M Hartenstine	1
07157	OLM03.2 Volatiles in Soils	SOW OLM03.2	1	01/26/2006 21:21	Jason M Long	0.84
00494	SW CLP Hg Digest	SOW ILM04.0	1	01/29/2006 23:15	Annamaria Stipkovits	
01849	SW CLP ICP Digest	SOW ILM04.0	1	01/29/2006 20:50	Annamaria Stipkovits	1
04185	CLP Soil Extraction	SOW OLM03.2	1	01/25/2006 07:00	Danette S Cavalier	1
04607	CLP Soil Extraction	SOW OLM03.2	1	01/23/2006 05:00	Mark P Mastropietro	1
05909	CLP Cyanide Solid	SOW ILM04.0	1	01/25/2006 11:40	Choon Y Tian	1
	Distillation					
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	01/20/2006 16:04	Justin M Bowers	n.a.
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	01/24/2006 22:15	Daniel S திரிந்	1



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n.a.

Lancaster Laboratories Sample No. SW 4692569

TIE023:6024:S010030 Soil Sample

Painesville, OH

Collected:01/19/2006 09:45

by MT

Account Number: 06101

Submitted: 01/20/2006 09:00

Reported: 02/16/2006 at 00:55

Tierra Solutions, Inc. PO Box 1487

Discard: 03/03/2006

SDG#: PNV88-05

6024-08389 GC/MS - LL Encore Prep SW-846 5035 1 08389 GC/MS - LL Encore Prep SW-846 5035 2

Painesville OH 44077

01/20/2006 16:16 Justin M Bowers 01/20/2006 16:17 Justin M Bowers

0064



Lancaster Laboratories, Inc. 2425 New Holland Pike PO Box 12425 Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681



Page 4 of 12

p Name: LAN	CASTER LABOR	ATORIES	Contract:			_	
b Code:	Case	No.:	SAS No.:				G No.: PNV88
	water): SOIL					-	ID: 4692569
vel (low/med				r	Date R	eceiv	ed: 01/20/06
Solids:	86.						ter a
C	oncentration	Units (ug/	/L or mg/kg dry	/ V	veignt): MG	/ KG
		1	<u> </u>	1 1		_	
	I CAS No.	 Analyte	 Concentration	ci	0	im i	
	1				. ~	i i	
	7429-90-5	Aluminum	11200	1		P	
	_7440-36-0 <u></u>					_ P_	
			16.2			_ P_	
	7440-39-3	Barium	56.3	<u> </u>		_ P_	
	7440-41-7					_ P_	
	J_7440-43-9 __					_ P_	
	7440-70-2					_ P_	
	1_7440-47-3_					_ P_	
	1_7440-48-4_		15.5	I		_ P_	
	1_7440-50-8_		29.1			_ P_	
	1_7439-89-6_		34900			_ P_	
	1_7439-92-1_		17.5			_ P_	
	7439-95-4			-!	_*	_ P_	
	7439-96-5					_ P_	
	1_7439-97-6_					-ICAI	
	7440-02-0_					_ P_	
	7440-09-7			_		_{P_	
	7782-49-2	·				_ P_	
	1_7440-22-4_					_ P_ P	
	7440-23-5 7440-28-0		· ——			- P-	
	7440-62-2		16.3			- F -	
	7440-66-6					- F	
	57-12-5_ 57-12-5_		0.22			CA	
	<u></u>	cyaniue					
lor Before:	BROWN	Clarit	y Before:	'-'		_ T_	xture: MEDIUM
or After: '			ty After:			Ar	tifacts:
ments:			-,		_		
aucires.							
							

USEPA - CLP





Page 5 of 12

1A VOLATILE ORGANICS ANALYSIS DATA SHEET	EPA	SAMPLE	NO.
Lab Name: Lancaster Laboratories Contract:	! ! !	6024-	: ! !
Lab Code: LANCAS Case No.: SAS No.:	SDG N	lo.:	
Matrix: (soil/water) SOIL Lab Sample ID: 46	92569		
Sample wt/vol: 5.94 (g/mL) g Lab File ID: HP07 Level: (low/med) LOW Date Received: 01 Moisture: not dec. 14 Date Analyzed: 01 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: Soil Extract Volume: (uL) Soil Aliquot Volu CONCENTRATION (ug/L or ug/Kg)	/20/06 /26/06 1.0 ume: (uI		26s06.d
! 74-87-3Chloromethane !	2	! U	·!
! 75-01-4Vinyl Chloride	2	! 0	1
! 74-83-9Bromomethane		! 0	į
! 75-00-3Chloroethane	3	! U	!
! 75-35-41,1-Dichloroethene	2	! U	!
! 67-64-1Acetone	8	! J	!
! 75-15-0Carbon Disulfide		! J	1
! 75-09-2Methylene Chloride	2	! U	1
75-34-31,1-Dichloroethane	1	! U	i
! 540-59-01,2-Dichloroethene (Total)	2	! 0	į.
! 78-93-32-Butanone	7	! U	!
! 67-66-3Chloroform !	1	! U	!
! 71-55-61,1,1-Trichloroethane	1	! U	1
! 56-23-5Carbon Tetrachloride !	1	! U	!
! 71-43-2Benzene !	1	! U	1
! 107-06-21,2-Dichloroethane !	2	! U	!
! 79-01-6Trichloroethene !	1	! U	į.
! 78-87-51,2-Dichloropropane !	3	! U	!
! 75-27-4Bromodichloromethane !	2	! U	!
! 10061-01-5cis-1,3-Dichloropropene !	1	! U	!
! 108-10-14-Methyl-2-Pentanone !	3	! U	1
! 108-88-3Toluene !	1	! J	1
! 10061-02-6trans-1,3-Dichloropropene !	1	! U	Į.
! 79-00-51,1,2-Trichloroethane !	2	! U	ļ
! 127-18-4Tetrachloroethene !	1	! Ü	į.
! 591-78-62-Hexanone	3	! U	!
! 124-48-1Dibromochloromethane !	1	! U	!
! 108-90+7Chlorobenzene !	1	! U	!
! 100-41-4Ethylbenzene !	1	! U	!
! 1330-20-7Xylene (Total)	1	! U	į
<u> </u>		_!	_!
page 1 of 2 FORM I VOA		OLM03	.0

5866



Analysis Report



Page 6 of 12

1A	EP.	A SAMPI	E NO.
VOLATILE ORGANICS ANALYSIS DATA SHEET	!	6024-	! !
Lab Name: Lancaster Laboratories Lab Code: LANCAS Case No.: Matrix: (soil/water) SOIL Sample wt/vol: 5.94 (g/mL) g Lab File ID: HP07566.i/0 Level: (low/med) LOW Date Received: 01/20/06		No.:	! cj26s06.d
Moisture: not dec. 14 GC Column: DB-624 ID: 0.25 (mm) Soil Extract Volume: (uL) Date Analyzed: 01/26/06 Dilution Factor: 1.0 Soil Aliquot Volume: CONCENTRATION UNITS:			
CAS NO. COMPOUND (ug/L or ug/Kg) MDL ug,	/Kg	Q	
! 100-42-5Styrene !	1	! Ü	_ !
! 75-25-2Bromoform !	1	! U	!
! 79-34-51,1,2,2-Tetrachloroethane !	1	! U	ļ
!		_!	!
page 2 of 2 FORM I VOA		OLMO:	3.0





Page 7 of 12

1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET	EPA SAMPLE NO
	! ! 6024-
Lab Name: Lancaster Laboratories Contract:	_ !
Lab Code: LANCAS Case No.: SAS No.:	SDG No.:
	nple ID: 4692569
	e ID: hb066.d
Level: (low/med) LOW Date Re	eceived: 01/20/06
% Moisture: not dec: 14 dec: Date Ex	tracted: 01/23/06
	nalyzed: 02/07/06
Injection Volume: 2 (uL) Dilutio	on Factor: 1.0
	tion: Sonc
CONCENTRATION UNITS	S:
CAS NO. COMPOUND (ug/L or ug/Kg) MDI	UG/KG Q
! 108-95-2 Phenol !	39 ! U !
! 111-44-4 bis(2-Chloroethyl)ether!	39 ! U !
! 95-57-8 2-Chlorophenol !	39 ! U !
! 541-73-1 1,3-Dichlorobenzene !	39 ! ប !
! 106-46-7 1,4-Dichlorobenzene !	39 ! U !
! 95-50-1 1,2-Dichlorobenzene !	39 ! U !
! 95-48-7 2-Methylphenol !	39 ! U !
! 108-60-1 2,2'-oxybis(1-Chloropropane) !	39 ! U !
	39 ! U !
! 106-44-5 4-Methylphenol !	39 ! U !
! 621-64-7 N-Nitroso-di-n-propylamine!	39 ! U !
! 67-72-1 Hexachloroethane !	39 ! U !
! 98-95-3 Nitrobenzene !	39 ! U !
! 78-59-1 Isophorone !	39 ! U !
! 88-75-5	78 ! U !
! 105-67-9 2,4-Dimethylphenol !	39 ! U !
! 111-91-1 bis(2-Chloroethoxy)methane!	39 ! U !
! 120-83-2 2,4-Dichlorophenol !	39 ! U !
! 120-82-1 1,2,4-Trichlorobenzene !	39 ! U !
! 91-20-3 Naphthalene !	
! 106-47-8 4-Chloroaniline !	160 ! U ! 39 ! U !
! 87-68-3 Hexachlorobutadiene !	
! 59-50-7 4-Chloro-3-methylphenol!	39 ! U ! 39 ! U !
! 91-57-6 2-Methylnaphthalene!	· · · · · · · · · · · · · · · · · ·
! 77-47-4 Hexachlorocyclopentadiene !	78 ! U !
! 88-06-2 2,4,6-Trichlorophenol!	39 ! U !
! 95-95-4 2,4,5-Trichlorophenol !	39 ! U !
! 91-58-7 2-Chloronaphthalene!	39 ! U !
! 88-74-4 2-Nitroaniline!	39 ! U !
! 131-11-3 Dimethylphthalate !	39 ! U !
! 606-20-2 2,6-Dinitrotoluene!	39 ! U !
!!	!
FORM I SV-1	OLM03.0





Page 8 of 12

1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET	I	EPA SAM	PLE N
SEMIVOLATILE ORGANICS ANALISIS DATA SHEET	,-		
	:	COO 4	
		6024-	
b Name: Lancaster Laboratories Contract:	_ '-		
ab Code: LANCAS	SDO	No.:_	
ntrix: (soil/water) SOIL Lab Sam	mple ID:	469256	9
ample wt/vol: 30 (g/mL) G Lab Fil	e ID: hb	066.d	
evel: (low/med) LOW Date Re	ceived:	01/20	/06
	tracted:	01/23	/06
	nalyzed:	02/07	/06
	n Factor:		
,,	tion: Son		
CONCENTRATION UNITS			
		0	
CAS NO. COMPOUND (ug/L or ug/Kg) MDI	. UG/NG	Q	
! 208-96-8 Acenaphthylene !	39	! U	
! 99-09-2 3-Nitroaniline !	78	! U	!
! 83-32-9 Acenaphthene !	39	! U	1
! 51-28-5 2,4-Dinitrophenol !	190	1 U	!
! 100-02-7 4-Nitrophenol !	39	! U	!
! 132-64-9 Dibenzofuran !	39	! Ü	!
! 121-14-2 2,4-Dinitrotoluene !	39	i u	į.
! 84-66-2 Diethylphthalate!	39	! Ü	!
! 7005-72-3 4-Chlorophenyl-phenylether !	39		1
! 86-73-7 Fluorene !	39	! 0	1
! 100-01-6 4-Nitroaniline !	78		i
! 534-52-1	39	! Ü	i
! 86-30-6 N-Nitrosodiphenylamine !	39	. U	i
	39	! ប	i
! 101-55-3 4-Bromophenyl-phenylether !	39	: U	
! 118-74-1 Hexachlorobenzene !	190	: U	
! 87-86-5 Pentachlorophenol !			:
! 85-01-8 Phenanthrene!	39	! U	:
! 120-12-7 Anthracene !	39	! U	:
! 86-74-8 Carbazole !	39	! 0	:
! 84-74-2 Di-n-butylphthalate!	78	! U	!
! 206-44-0 Fluoranthene!	39	! 0	!
! 129-00-0 Pyrene!	39	! U	!
! 85-68-7 Butylbenzylphthalate!	39	! 0	!
! 91-94-1 3,3'-Dichlorobenzidine !	78	! U	!
! 56-55-3 Benzo(a)anthracene !	39	! U	į
! 117-81-7 bis(2-Ethylhexyl)phthalate!	39		!
! 218-01-9 Chrysene!	39	! U	!
! 117-84-0 Di-n-octylphthalate !	39	! U	į
! 205-99-2 Benzo(b) fluoranthene !	39	! ប	į.
! 207-08-9 Benzo(k) fluoranthene !	39	! U	ţ
		,	



Analysis Report



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1C cont	EP	A S	AMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET	,—		
	1	602	4- !
Lab Name: Lancaster Laboratories Contract:	!		1
Lab Code: LANCAS Case No.: SAS No.:	SDG	No.	:
Matrix: (soil/water) SOIL Lab Sample I	D: 4	692	569
Sample wt/vol: 30 (g/mL) G Lab File ID:	hb0	66.	d
Level: (low/med) LOW Date Received	d:	01/	20/06
% Moisture: not dec: 14 dec: Date Extract			
Concentrated Extract Volume: 500 (uL) Date Analyze	Analyzed: 02/07/0		
Injection Volume: 2 (uL) Dilution Fac			
GPC Cleanup: (Y/N) Y pH: Extraction:	Sono	2	
CONCENTRATION UNITS:			
CAS NO. COMPOUND (ug/L or ug/Kg) MDL UG/	KG	Q	
! 50-32-8 Benzo(a)pyrene !	39	! U	<u> </u>
! 193-39-5 Indeno(1,2,3-cd)pyrene !	39	! U	!
1 53-70-3 Dibenz (a, h) anthracene !	39	! U	1
! 191-24-2 Benzo(q,h,i)perylene !	39	! 0	!
<u> </u>		!	į.
FORM I SV-3			OLM03.0





Page 10 of 12

EPA SAMPLE NO. ORGANICS ANALYSIS DATA SHEET 6024-Ţ Lab Name:Lancaster Laboratories Contract: Case No.: SAS No.: SDG No.: PNV88 SDG No.: PNV88

Sample wt/vol: 30 (g/mL) g Lab Sample ID: 4692569

Sample wt/vol: 30 (g/mL) g Lab File ID: 4D1353.58R

Moisture: 14 decanted: (Y/N)N Date Received: 01/20/06

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 01/25/06

Concentrated Extract Volume: 10000 / 7 1 Injection Volume: 1 (uL) Dilution Factor: pH: 8 Sulfur Cleanup: (Y/N) N GPC Cleanup: (Y/N) Y CONCENTRATION UNITS: (ug/L or ug/Kg) MDL ug/kg Q CAS NO. COMPOUND

319-84-6alpha-BHC	1 0.20!1	J !
58-89-9gamma-BHC (Lindane)	.20!1	J!
319-85-7beta-BHC	. 0.23!	JP !
319-86-8delta-BHC	0.20!	j [
	. 0.20!1	U !
	9.20!	! ט
		U!
	! 0.20!!	υ!
		U!
	. 0.38!	υ !
		! ט
	. 0.381	ប !
	1 0.38!	U!
	! 0.51! ¹	U!
	i 0.38!	U !
	. 0.38!	υ!
	0.78!	υ!
	! 2.3!	υ!
	1 0.381	υ!
	! 0.38!	υ!
	1 34!	υ!
	. 20!	ប !
	! 50!	υ!
	! 41!	U!
	! 29!	U!
	! 10!	U !
	! 9.3!	U !
	. 20!	ប !
	!!	!
		319-85-7

FORM I

OLM03.0





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1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

6024-

EPA SAMPLE NO.

Lab Name: Lancaster Laboratories
Lab Code: LANCAS
Case No.:

Matrix: (soil/water) SOIL
Sample ID: 4692569
Sample wt/vol: 5.94 (g/mL) g
Lab File ID: HP07566.i/06jan26b.b/rj26s06.d
Level: (low/med) LOW
Moisture: not dec. 14
GC Column: DB-624 ID: 0.25 (mm)
Soil Extract Volume:

Number TICs found: 5

Contract:

Lab Sample ID: 4692569
Lab File ID: HP07566.i/06jan26b.b/rj26s06.d
Date Received: 01/20/06
Date Analyzed: 01/26/06
Dilution Factor: 1.0
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

(ug/L or ug/Kg) ug/Kg Number TICs found: 5

	: COM COMD MANE		EST. CONC.	
 1.	:=!===================================			
2. 78-78-4		1 2.86 !	30	! NJ
3. 109-66-0	·	! 3.14 !	20	! NJ
	!Pentane, 2-methyl-	! 4.39 !	10	! NJ
5. 110-54-3	•	! 5.20 !		! NJ
6		! !		į.
7	<u> </u>	— <u>; — </u>		!
7	<u> </u>			!
8		! !		!
9		· · · · · · · · · · · · · · · · · · ·		!
10				!
11		<u> </u>		!
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13. 14.	:			!
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26	1			!
27		1 !		!
28		!!		!
29		! !		.1
30		! ! !		!
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FORM I VOA-TIC

OLM03.0





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EPA SAMPLE NO. SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS 16024-Lab Name: Lancaster Laboratories Contract: !

Lab Code: LANCAS Case No.: SAS No.: SDG No.: Matrix: (soil/water) SOIL Lab Sample ID: 4692569

Sample wt/vol: 30 (g/mL) g Lab File ID: hb066.d Level: (low/med) LOW Date Received: 01/20/06

% Moisture: 14 Decanted: (Y/N) Date Extracted: 01/23/06

Concentrated Extract Volume: 500 (uL) Date Analyzed: 02/07/06

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: Y pH: Extraction: Sonc CONCENTRATION UNITS:

Number TICs found: 9 (ug/L or ug/Kg) ug/Kg

11.	CAS NUMBER	! COMPOUND NAME		EST. CONC.	_
2. !Unknown		-			
3. !Unknown			! 25.264 !	310	! J B
5. Unknown Carboxylic Acid 30.756 470 J B 6. Unknown 30.935 140 J 7. Unknown 32.487 330 J B 8. Unknown 32.666 95 J 9. Unknown 47.368 2500 J 10.			! 28.509 !	110	! J
5. !Unknown Carboxylic Acid ! 30.756 ! 470 ! J B 6. !Unknown ! 30.935 ! 140 ! J 7. !Unknown ! 32.487 ! 330 ! J B 8. !Unknown ! 32.666 ! 95 ! J 9. !Unknown ! 47.368 ! 2500 ! J 10.	4 .	!Unknown	! 30.517 !	140	! J
7. Unknown 32.487 330 J B B Unknown 32.666 95 J 9. Unknown 47.368 2500 J 10.	5.	!Unknown Carboxylic Acid	! 30.756 !	470	! J B
8. Unknown 32.666 95 J 9. Unknown 47.368 2500 J 10.	6.	!Unknown	! 30.935 !	140	! J
9. Unknown 47.368 2500 J 10.	7.	! Unknown	! 32.487 !	330	! J B
10.	8.	! Unknown	! 32.666 !	95	! J
11.	9.	! Unknown	! 47.368 !	2500	! J
11.	10.	!	!!!		!
12.	11.	!	!!		!
13.	12.		<u>-,</u> ,		!
14.	13.	!	<u> </u>		!
15.	14.	!	! !		!
16.	15.	!	_ ! !		!
17.	16.	!	!!		!
18.	1/.	. <u></u>	!!		!
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22.	20.	! <u> </u>	_!!		!
22.	Z1.	!	_!!		!
23.	22.	!	_!!		!
24.	23	!	_!!	···	!
25.	24	!	_!!		!
26.	25	!	!!		!
28. ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	26	!	_!!		!
28!!!!!!	21.	!	_!!		!
29. !!!!!!!	28	! <u></u>	_!!		!
30!!!	29.	!	!!		!

page 1 of 1

FORM I SV-1

OLM03.0



Page 1 of 12

4692570 Lancaster Laboratories Sample No. SW

TIE023:6028:S010050 Soil Sample

Painesville, OH

Collected: 01/19/2006 10:25

by MT

Account Number: 06101

Submitted: 01/20/2006 09:00

Tierra Solutions, Inc. PO Box 1487

Reported: 02/16/2006 at 00:55

Discard: 03/03/2006

Painesville OH 44077

6028- SDG#: PNV88-06

				pry		
CAT			Dry	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00383	TOC by Lloyd Kahn	n.a.	N.D.	260.	mg/kg	1
	The quantitation limit for tot	al organic carb	oon was increa	sed		
	due to the nature of the sampl	e matrix.				
01353	Moisture	n.a.	13.3	0.50	8	1
01441	рН	n.a.	7.53	0.0100	Std. Units	1
	The pH of the method blank (ba	ckground soil)	analyzed with	the sample was 7.0	06.	
	The pH was performed on a 1:1					
	of deionized water) after beir					
05892	Hexavalent Chromium by IC	18540-29-9	N.D.	0.23	mg/kg	1
07552	ORP Observed	n.a.	120.	1.0	mV	1
	The ORP reported is the observeduring the analysis.	red potential of	f the platinum	electrode used		

07157 OLM03.2 Volatiles in Soils

A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

07125 SVOA Library Search OLM03.2

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form. An "X" indicates an isomer of the listed compound.

VOA Library - Search OLM03.2

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.





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4692570 Lancaster Laboratories Sample No. SW

TIE023:6028:S010050 Soil Sample

Painesville, OH

Collected:01/19/2006 10:25 by MT

Account Number: 06101

Submitted: 01/20/2006 09:00

PO Box 1487 Reported: 02/16/2006 at 00:55

Discard: 03/03/2006

Painesville OH 44077

Tierra Solutions, Inc.

6028- SDG#: PNV88-06

Laboratory Chronicle

		Laboratory	CHLO			Dilution
CAT				Analysis		Factor
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	1
00159	Mercury	SOW ILM04.0	1	01/30/2006 12:08	Damary Valentin	1
01643	Aluminum	SOW ILM04.0	1	01/31/2006 08:39	Joanne M Gates	1
01650	Calcium	SOW ILM04.0	1	01/31/2006 08:39	Joanne M Gates	1
01654	Iron	SOW ILM04.0	1	01/31/2006 08:39	Joanne M Gates	1
01657	Magnesium	SOW ILM04.0	1	01/31/2006 08:39	Joanne M Gates	
01662	Potassium	SOW ILM04.0	1	01/31/2006 08:39	Joanne M Gates	1
01667	Sodium	SOW ILMO4.0	1	01/31/2006 08:39	Joanne M Gates	1
06925	Thallium	SOW ILM04.0	2	02/08/2006 13:21	Joanne M Gates	1
06935	Arsenic	SOW ILM04.0	1	01/31/2006 08:39	Joanne M Gates	1
06936	Selenium	SOW ILM04.0	2	02/08/2006 13:21	Joanne M Gates	1
06944	Antimony	SOW ILMO4.0	1	01/31/2006 08:39	Joanne M Gates	1
06946	Barium	SOW ILM04.0	1	01/31/2006 08:39	Joanne M Gates	1
06947	Beryllium	SOW ILM04.0	1	01/31/2006 08:39	Joanne M Gates	1
06949	Cadmium	SOW ILMO4.0	1	01/31/2006 08:39	Joanne M Gates	1
06951	Chromium	SOW ILMO4.0	1	01/31/2006 08:39	Joanne M Gates	1
06952	Cobalt	SOW ILMO4.0	1	01/31/2006 08:39	Joanne M Gates	1
06953	Copper	SOW ILM04.0	1	01/31/2006 08:39	Joanne M Gates	1
06955	Lead	SOW ILMO4.0	2	02/08/2006 13:21	Joanne M Gates	1
06958	Manganese	SOW ILMO4.0	1	01/31/2006 08:39	Joanne M Gates	1
06961	Nickel	SOW ILM04.0	1	01/31/2006 08:39	Joanne M Gates	1
06966	Silver	SOW ILMO4.0	1	01/31/2006 08:39	Joanne M Gates	1
06971	Vanadium	SOW ILMO4.0	1	01/31/2006 08:39	Joanne M Gates	1
06972	Zinc	SOW ILM04.0	1	01/31/2006 08:39	Joanne M Gates	1
00372	TOC by Lloyd Kahn	Lloyd Kahn modified	1	02/02/2006 13:04	James S Mathiot	1
01353	Moisture	SOW OLM03.2	1	01/24/2006 16:56	Scott W Freisher	1
01441	pH	SOW OLM04.3	1	01/24/2006 18:30	Luz M Groff	1
05892	Hexavalent Chromium by IC	SW-846 7199	1	01/25/2006 14:03	William L Hamaker Jr	1 1
05910	Total Cyanide CLP (solid)	SOW ILM04.0	1	01/27/2006 17:44	Venia B McFadden	_
07552	ORP Observed	ASTM D1498	1	01/30/2006 08:30	Michelle L Heidig	1
04562	OLM03.2	SOW OLM03.2	1	01/31/2006 20:02	Richard A Shober	1
5.502	Pesticides/PCBs/Soil					1
04438	OLMO3.2 Semivolatiles/Soil	SOW OLM03.2	1	02/07/2006 04:13	Linda M Hartenstine	0.93
07157	OLM03.2 Volatiles in Soils	SOW OLM03.2	1	01/26/2006 21:48	Jason M Long	
00494	SW CLP Hg Digest	SOW ILM04.0	1	01/29/2006 23:15	Annamaria Stipkovits	
01849	SW CLP ICP Digest	SOW ILM04.0	1	01/29/2006 20:50	Annamaria Stipkovits	1
04185	CLP Soil Extraction	SOW OLM03.2	1	01/25/2006 07:00	Danette S Cavalier	_
04607	CLP Soil Extraction	SOW OLM03.2	1	01/23/2006 05:00	Mark P Mastropietro	1
05909	CLP Cyanide Solid	SOW ILMO4.0	1	01/25/2006 11:40	Choon Y Tian	1
20323	Distillation				- 11 N Barrers	n n
07578	GC/MS-HL Encore Prep-NC	sw-846 5035	1	01/20/2006 16:05	Justin M Bowers Daniel S Smith	n.a. 1
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	01/24/2006 22:15	Daniel S Smith	Ţ





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Lancaster Laboratories Sample No. SW 4692570

TIE023:6028:S010050 Soil Sample

Painesville, OH

Collected:01/19/2006 10:25

by MT

Account Number: 06101

Submitted: 01/20/2006 09:00

Reported: 02/16/2006 at 00:55 Discard: 03/03/2006

PO Box 1487

Painesville OH 44077

Tierra Solutions, Inc.

6028-SDG#: PNV88-06

08389 GC/MS - LL Encore Prep SW-846 5035 08389 GC/MS - LL Encore Prep SW-846 5035

01/20/2006 16:18 2 01/20/2006 16:19

Justin M Bowers Justin M Bowers n.a. n.a.





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		INORGANIC	ANALYSIS DATA	SF	HEET	EPA SAMPLE NO.
						6028-
ab Name: LANC ab Code: atrix (soil/w evel (low/med Solids:	Case vater): SOIL l): LOW 86.	No.: 7	Contract: SAS No.: _		Date Re	SDG No.: PNV88 mple ID: 4692570 eceived: 01/20/06): MG/KG
!	CAS No.	 Analyte	 Concentration	 C	l I Q	
ا ب	7429-90-5	(Aluminum	10700	¦-¦	·	_ '
,	_7440-36-0_			ָּוֹ שׁ וֹ	i	ip i
,	7440-38-2					P
	7440-39-3					P_
	7440-41-7					[P_1
	7440-43-9		0.15	ן זו ן	·	_ P_
J	_7440-70-2_		126800			_ <u> P_ </u>
!	_7440-47-3_					_ P_
!	_7440-48-4_		113.4 127.4			_ P
!	_7440-50-8_ _7439-89-6_		132800			_ F_ P
, 	_7439-92-1_	II.ead	15.7			- î
	7439-95-4			i – i	i *	IP I
	7439-96-5					_ P_
ĺ	_7439-97-6 <u>_</u>	Mercury	0.020	ן ט ן	1	_ CV
	7440-02-0		33.8			_ P_
	7440~09-7					_ P_
l	_7782-49-2_					_ P_
!	_7440-22-4_				-	_ ₽_
!	_7440-23-5_					_ P_ P
!	_7440-28-0_ 7440-62-2					_ F
	7440-66-6					-'^-' P
	57-12-5					CA
i		i -	i —			_ · · · · · · · · · · · · · · · · · · ·
olor Before:	BROWN	Clari	ty Before:	_		Texture: MEDIUM
olor After: Y omments:	ELLOW	Clari	ty After:	_		Artifacts:
			FORM I - IN			ILM04.0

USEPA - CLP





Page 5 of 12

1A		EP	A SAMPI	LE NO.
VOLATILE ORGANICS AND	ALYSIS DATA SHEET			
		!		!
		ļ	6028-	ļ.
Lab Name: Lancaster Laboratories	Contract:	!		!
Lab Code: LANCAS Case No.:	SAS No.:	SDG	No.:	
Matrix: (soil/water) SOIL	Lab Sample ID: 4692570			
Sample wt/vol: 5.36 (g/mL) g	Lab File ID: HP07566.i,	/06jan	26b.b/1	rj26s07.d
Level: (low/med) LOW	Date Received: 01/20/0	5		
Moisture: not dec. 13	Date Analyzed: 01/26/0			
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0			
Soil Extract Volume: (uL)		(u	L)	
CAS NO. COMPOUND	(ug/L or ug/Kg) MDL ug		Q	
				_
! 74-87-3Chloromethan		2	! U	!
! 75-01-4Vinyl Chloric	de !	2	! U	!
! 74-83-9Bromomethane	!	3	! U	!
! 75-00-3Chloroethane	!	3	! U	į
! 75-35-41,1-Dichloroe	ethene!	2	i n	!
! 67-64-1Acetone	!	16	!	!
! 75-15-0Carbon Disul:	fide !	3	! U	!
! 75-09-2Methylene Chi	loride !	2	! U	!
! 75-34-31,1-Dichloroe	eth a ne!	1	! U	į
! 540-59-01,2-Dichloro	ethene (Total) !	2	! U	į
! 78-93-32-Butanone	!	7	! U	!
! 67-66-3Chloroform	!	1	! U	!
! 71-55-61,1,1-Trichle	oroethane!	1	! U	!
! 56-23-5Carbon Tetrac		1	! U	!
! 71-43-2Benzene	!	1	! J	!
! 107-06-21,2-Dichloroe	ethane !	2	! U	į
! 79-01-6Trichloroethe		1	! U	į.
! 78-87-51,2-Dichloro		3	! U	ļ
! 75-27-4Bromodichlore			! 0	<u>!</u>
! 10061-01-5cis-1,3-Dich			! U	i
! 108-10-14-Methyl-2-Pe	- -	3		í
! 108-88-3Toluene	encanone :	2	. J	í
! 10061-02-6trans-1,3-Dic	chloropropene !	1		i
! 79-00-51,1,2-Trichle			! U	i
! 127-18-4Tetrachloroe		1		
! 591-78-62-Hexanone	tilelle :		! U	i I
	emathana !	1		: }
! 124-48-1Dibromochlore		1	! U	:
! 108-90-7Chlorobenzene	e : •	_		:
! 100-41-4Ethylbenzene		1	! "	:
! 1330-20-7Xylene (Tota	L) !	1	! J	: 1
naga 1 of 2				:
page 1 of 2	~ ~		OLM03	2 ^
FORM I VO	JA .		OTMUS	3.0



Analysis Report



Page 6 of 12

1A	EP	A SAMPL	E NO.
VOLATILE ORGANICS ANALYSIS DATA SHEET	!	6028-	! !
Lab Name: Lancaster Laboratories Lab Code: LANCAS Case No.: Matrix: (soil/water) SOIL Sample wt/vol: 5.36 (g/mL) g Level: (low/med) LOW Moisture: not dec. 13 GC Column: DB-624 ID: 0.25 (mm) Soil Extract Volume: CAS NO. COMPOUND Case No.:	(06jan	L)	! j26s07.d
! 100-42-5Styrene ! 75-25-2Bromoform ! 79-34-51,1,2,2-Tetrachloroethane	1	! U ! U ! U	! ! !
page 2 of 2 FORM I VOA		OLM03	.0





Page 7 of 12

1B	EPA SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET	
DEMITODATIES ONORMICO IMMETOTO DILLI	!
	! 6028- !
Lab Name: Lancaster Laboratories Contract:	1
	SDG No.:
ndb code: Amono	
110012.11 (0011)	
Combro way and a filture, a	
Dever: (10%/med) Don	
% Moisture: not dec: 13 dec: Date Extracted	
Concentrated Extract Volume: 500 (uL) Date Analyzed:	
Injection Volume: 2 (uL) Dilution Factor	
GPC Cleanup: (Y/N) Y pH: Extraction: S	Sonc
CONCENTRATION UNITS:	
CAS NO. COMPOUND (ug/L or ug/Kg) MDL UG/KG	G Q
: 100-33 Z- FIGHOT	38 ! U !
! 111-44-4 bis(2-Chloroethyl)ether !	38 ! U !
	38 ! U !
! 106-44-5 4-Methylphenol !	38 ! U !
: 100 44 5 4 Heelijiphonoi	38 ! U !
! 67-72-1 Hexachloroethane !	38 ! U !
! 98-95-3 Nitrobenzene!	38 ! U !
: 98-93-3 ··· Niciobenzene	38 ! U !
: 76-39 1	38 ! U !
. 00 75 5 E NIEGEOPHONOI	77 ! Ü !
: 105-07 5 274 Bimeengaphenoa	77 : U :
: III-91 1 Diste chiclection, method	38 ! U !
. 120 03 2 2, 1 21cm2020pm3m-1	
1,2,4 111011010101010	
: 91 20 5 Naphenarena	38 ! U !
100 47 0 4 00101040111100	50 ! U !
: 67-00-5 Mexicitoropacaarone	38 ! U !
: 55 50 / 4 chibic o meenyaphanea	38 ! U !
: 51-57 6 Z McChylhaphenalane	38 ! U !
: //-4/-4 nckacmioidojoidpenedalens	77 ! U !
: 00-00 2	38 ! U !
! 95-95-4 2,4,5-Trichlorophenol!	38 ! U !
: 31 30 / Z childrendialone	38 ! U !
! 88-74-4 2-Nitroaniline!	38 ! U !
! 131-11-3 Dimethylphthalate !	38 ! U !
	38 ! U !
	!!
FORM I SV-1	OLM03.0





Page 8 of 12

1C		EPA SAM	PLE N
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEE	<u> </u>		
	:	6000	
	!	6028-	
b Name: Lancaster Laboratories Contract:			
b Code: LANCAS		3 No.:_	
trix: (soil/water) SOIL Lab S	ample ID:	469257	0
mple wt/vol: 30 (g/mL) G Lab F.	ile ID: hk	067.d	
evel: (low/med) LOW Date	Received:	01/20	/06
	Extracted:	01/23	/06
	Analyzed:	02/07	/06
······································	ion Factor:		
9	action: Sor		
CONCENTRATION UNI			
		Q	
CAS NO. COMPOUND (ug/L or ug/Kg) M	DI GG/KG	v	
! 208-96-8 Acenaphthylene	! 38	! U	!
! 99-09-2 3-Nitroaniline	! 77	! U	!
! 83-32-9 Acenaphthene	! 38	! U	i
! 51-28-5 2,4-Dinitrophenol	! 190		i
! 100-02-7 4-Nitrophenol	! 38	ט !	i
· ————————————————————————————————————	! 38	! U	;
! 132-64-9 Dibenzofuran		: U	:
! 121-14-2 2,4-Dinitrotoluene	! 38		:
! 84-66-2 Diethylphthalate	! 38	! 0	:
! 7005-72-3 4-Chlorophenyl-phenylether	! 38		!
! 86 - 73-7 Fluorene	! 38	! Ü	Į.
! 100-01-6 4-Nitroaniline	! 77		!
! 534-52-1 4,6-Dinitro-2-methylphenol	! 38	! U	!
! 86-30-6 N-Nitrosodiphenylamine	! 38	! U	!
! 101-55-3 4-Bromophenyl-phenylether	! 38	i O	!
! 118-74-1 Hexachlorobenzene	! 38	! U	!
! 87-86-5 Pentachlorophenol	! 190	! U	1
! 85-01-8 Phenanthrene	1 44	! J	!
! 120-12-7 Anthracene	! 38	! U	1
! 86-74-8 Carbazole	! 38	! U	!
84-74-2 Di-n-butylphthalate	! 77	! 0	!
! 206-44-0 Fluoranthene	! 38	! U	!
! 129-00-0 Pyrene	! 38	! ប	ļ
! 85-68-7 Butylbenzylphthalate	! 38	! 0	1
! 91-94-1 3,3'-Dichlorobenzidine	. 55	. U	i
! 56-55-3 Benzo(a) anthracene	! 38	. U	i
	! 38		1
! 117-81-7 bis(2-Ethylhexyl)phthalate	! 38		: I
! 218-01-9 Chrysene			:
! 117-84-0 Di-n-octylphthalate	! 38		:
! 205-99-2 Benzo(b) fluoranthene	! 38	! U	:
! 207-08-9 Benzo(k)fluoranthene	! 38	! U	!
!	!	1	!



Analysis Report



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1C cont	EPA SAMPLE NO.
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET	
	!
	! 6028- !
Lab Name: Lancaster Laboratories Contract:	!!
Lab Code: LANCAS Case No.: SAS No.: S	DG No.:
Matrix: (soil/water) SOIL Lab Sample ID:	4692570
Sample wt/vol: 30 (g/mL) G Lab File ID:	hb067.d
Level: (low/med) LOW Date Received:	01/20/06
% Moisture: not dec: 13 dec: Date Extracted	1: 01/23/06
Concentrated Extract Volume: 500 (uL) Date Analyzed:	02/07/06
Injection Volume: 2 (uL) Dilution Facto	r: 1.0
GPC Cleanup: (Y/N) Y pH: Extraction: S	onc
CONCENTRATION UNITS:	
CAS NO. COMPOUND (ug/L or ug/Kg) MDL UG/KG	Q Q
! 50-32-8 Benzo(a)pyrene	18 ! U !
	18 ! U !
! 53-70-3 Dibenz(a,h)anthracene ! 3	18 ! U !
! 191-24-2 Benzo(g,h,i)perylene! 3	18 ! U !
	!!
FORM I SV-3	OLM03.0





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EPA SAMPLE NO. ORGANICS ANALYSIS DATA SHEET 6028-Ţ Lab Name: Lancaster Laboratories Contract: Case No.: SAS No.: SDG No.: PNV88 Lab Code: Lab Sample ID: 4692570 Matrix: (soil/water) SOIL 30 (g/mL) g Matrix: (302)
Sample wt/vol: 30 (g/mm), 5
decanted: (Y/N)N
SONC Lab File ID: 4D1353.59R Date Received: 01/20/06 Date Extracted: 01/25/06 Extraction: (SepF/Cont/Sonc) SONC 10000 (uL) Date Analyzed: 01/31/06 Concentrated Extract Volume: 1 Injection Volume: 1 (uL) Dilution Factor: pH: 8 Sulfur Cleanup: (Y/N) N GPC Cleanup: (Y/N) Y

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) MDL ug/kg Q

١-	<u> </u>		- !
1	319-84-6alpha-BHC!	0.20!U	!
i	58-89-9gamma-BHC (Lindane) !	0.20!U	i
į	319-85-7beta-BHC!	0.20!0	!
į	319-86-8delta-BHC !	0.20!0	!
1	76-44-8Heptachlor !	0.20!U	!
1	309-00-2Aldrin	0.20!0	ļ.
į	1024-57-3Heptachlor epoxide !	0.20!0	ļ
į	5103-74-2gamma-Chlordane!	0.20!0	!
ŗ	5103-71-9alpha-Chlordane !	0.20!U	!
•	72-55-94,4'-DDE!	0.38!0	!
1	959-98-8Endosulfan I	0.20!U	1
1	60-57-1Dieldrin !	0.38!U	ļ
į	72-20-8Endrin!	0.38!0	į.
ļ	72-54-84,4'-DDD !	0.50!U	!
į	33213-65-9Endosulfan II	0.38!0	!
į	50-29-34,4'-DDT	0.38!0	!
!	7421-93-4Endrin aldehyde	0.77!0	!
1	72-43-5Methoxychlor	2.3!U	!
į	1031-07-8Endosulfan sulfate !	0.38!U	į
į	53494-70-5Endrin ketone !	0.38!U	į
į	12674-11-2Aroclor-1016	17!U	!
!	11104-28-2Aroclor-1221	20!0	!
į	11141-16-5Aroclor-1232!	30!U	ļ
į	53469-21-9Aroclor-1242!	10!0	į
į	12672-29-6Aroclor-1248!	26!0	!
!	11097-69-1Aroclor-1254!	10!0	!
į	11096-82-5Aroclor-1260!	9.2!0	!
!	8001-35-2!	20!ប	!
!		!!	_!

FORM I

OLM03.0

EBBB





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1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

! 6028-Lab Name: Lancaster Laboratories

Lab Code: LANCAS

Case No.:

Matrix: (soil/water) SOIL

Sample wt/vol: 5.36 (g/mL) g

Lab Sample ID: 4692570

Lab File ID: HP07566.i/06jan26b.b/rj26s07.d

Level: (low/med) LOW

Moisture: not dec. 13

GC Column: DB-624 ID: 0.25 (mm)

Soil Extract Volume:

(uL)

CONCENTRATION UNITS:

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

EPA SAMPLE NO.

Number TICs found: 10

CAS NUMBER	! COMPOUND NAME	! RT !	
	:=!============ !Unknown	! 2.34 !	!===== ! J
1.	!Butane, 2-methyl-	! 2.84 !	 ! NJ
	· · · · · · · · ·	! 3.14 !	 ! NJ
3. 109-66-0	!Dimethyl sulfide	! 3.82 !	 ! NJ
	!Pentane, 2-methyl-	! 4.40 !	 ! NJ
	!Unknown	! 4.78 !	 1 5
6.	! Unknown	! 5.20 !	 1 3
7.	!Unknown		 . J
8.	!Cyclohexane		! NJ
	!Cyclohexane, methyl-	! 8.57 !	! NJ
		; 0.5, .	 1
·	_	—;——;	 ·——
2		;i	 ;
3		—- ii	 i
4		—-¦;	i
.5		ii	 <u> </u>
.6		—-;——-i	 ;
7		—-;——;	 !
18.		;i	 !
		ii	 <u>i — — </u>
20		;;	 !
21	!	—;——;	 <u></u>
22	·	—;——;	 !
23		;;	 !
24	ţ	— ;;	 !
25	<u>. </u>	—;——;	 !
26	_	;;	 i
27			 !
28		—- <u>; —-</u>	!
29		;;	!
30			1

FORM I VOA-TIC

OLM03.0





Page 12 of 12

EPA SAMPLE NO. SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS 16028-

Lab Name: Lancaster Laboratories Contract: !

Lab Code: LANCAS Case No.: SAS No.: SDG No.: Matrix: (soil/water) SOIL Lab Sample ID: 4692570

Sample wt/vol: 30 (g/mL) g Lab File ID: hb067.d

Level: (low/med) LOW Date Received: 01/20/06

% Moisture: 13 Decanted: (Y/N) Date Extracted: 01/23/06

Concentrated Extract Volume: 500 (uL) Date Analyzed: 02/07/06

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: Y pH: Extraction: Sonc

CONCENTRATION UNITS:

Number TICs found: 30 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	! ! COMPOUND NAME	!	RT		. CONC.	!	Q	
1.	=== ! ================================	==!	14.886	!===== !	100	•	:= =: J	====
2.	! Unknown	i			99		J	
3.	!Unknown	,			210		J	
4.	!Unknown	•			120	-	J	
5.	!Unknown	,			94		Ĵ	
6.	!Unknown	•	19.547	t	91	-	J	
7.	!Unknown	•	19.933	i	120	-	Ĵ	
8.	!Unknown	,	20.052	i	110	-	J	
9.	!Unknown	•	20.777	ŀ	110	-	J	
10.	!Unknown	,	20.886	!	84	-	J	
11.	!Unknown	1		!	90	-	J	
12.	!Unknown	;		ŀ	84	-	J	
13.	!Unknown	,		!	120	į	J	
14.	!Unknown	į		!	99	į	J	
15.	!Unknown	1	24.105	!	90	!	J	
16.	!Unknown	!	24.980	!	85	!	J	
17.	!Unknown	1	25.269	!	220	ţ	J	В
18.	!Unknown	į.	26.424	!	130	ļ	J	
19.	!Unknown	!	27.580	!	110	ţ	J	
20.	!Unknown	. !	28.507	!	120	!	J	
21.	!Unknown	!	28.747	!	93	!	J	
22.	!Unknown	1	28.837	!	170	1	J	
23.	!Unknown	1	29.047	!	92	ŗ	J	
24.	!Unknown	1	30.505	!	120	1	J	
25.	!Unknown Carboxylic Acid	1	30.755	!	1400	1	J	В
26.	!Unknown	į	30.935	!	220	1	J	
27.	!Unknown	Į.	32.485	!	880	1	J	В
28.	!Unknown	!	32.665	!	160	!	J	
29.	!Unknown	. !	32.905	!	86	į	J	
30.	!Unknown	!	47.380	!	2200	!	J	
	!	!		!		!_		

page 1 of 1

FORM I SV-1

OLM03.0

BARS.





Page 1 of 12

Lancaster Laboratories Sample No. SW 4692571

TIE023:6008:S005020 Soil Sample

Painesville, OH

Collected: 01/19/2006 11:30

by MT

Account Number: 06101

Tierra Solutions, Inc.

Submitted: 01/20/2006 09:00

PO Box 1487

Reported: 02/16/2006 at 00:55

Painesville OH 44077

Discard: 03/03/2006

6008- SDG#: PNV88-07

CAT			Dry		Dry Method		Dilution
No.	Analysis Name	CAS Number	Result		Detection Limit	Units	Factor
00383	TOC by Lloyd Kahn	n.a.		J	260.	mg/kg	1
	The quantitation limit for TOC matrix.	was increased	due to the	nature	of the sample		
01353	Moisture	n.a.	13.8		0.50	%	1
01441	рн	n.a.	7.52		0.0100	Std. Units	1
	The pH of the method blank (ba	ckground soil)	analyzed wi	ith the	sample was 7.06	•	
	The pH was performed on a 1:1						
	of deionized water) after bein						
05892	Hexavalent Chromium by IC	18540-29-9	N.D.		0.23	mg/kg	1
07552	ORP Observed	n.a.	126.		1.0	mV	1
	The ORP reported is the observ during the analysis.	ed potential of	f the platir	num ele	ctrode used		
07157	OLM03.2 Volatiles in Soils						

A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

O7125 SVOA Library Search OLM03.2

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form. An "X" indicates an isomer of the listed compound.

O7126 VOA Library - Search OLM03.2

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined on the back of this form.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

8086



Lancaster Laboratories, Inc. 2425 New Holland Pike PO Box 12425 Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681



Page 2 of 12

Lancaster Laboratories Sample No. SW 4692571

TIE023:6008:S005020 Soil Sample

Painesville, OH

Collected:01/19/2006 11:30 by MT

Account Number: 06101

Tierra Solutions, Inc. Submitted: 01/20/2006 09:00 PO Box 1487

Reported: 02/16/2006 at 00:55

Painesville OH 44077 Discard: 03/03/2006

6008- SDG#: PNV88-07

Laboratory Chronicle

		Edsordeory	0	Analysis		Dilution
CAT	Analysis Name Method		Trial#	Date and Time	Analyst	Factor
No.	Analysis Name	SOW ILMO4.0	1	01/30/2006 12:09	Damary Valentin	1
00159	Mercury	SOW ILMO4.0	1	01/31/2006 08:44	Joanne M Gates	1
01643	Aluminum	SOW ILMO4.0	1	01/31/2006 08:44	Joanne M Gates	1
01650	Calcium	SOW ILMO4.0	1	01/31/2006 08:44	Joanne M Gates	1
01654	Iron	SOW ILM04.0	1	01/31/2006 08:44	Joanne M Gates	1
01657	Magnesium	SOW ILM04.0	1	01/31/2006 08:44	Joanne M Gates	1
01662	Potassium	SOW ILM04.0	1	01/31/2006 08:44	Joanne M Gates	1
01667	Sodium	SOW ILMO4.0	2	02/08/2006 13:25	Joanne M Gates	1
06925	Thallium	SOW ILMO4.0	1	01/31/2006 08:44	Joanne M Gates	1
06935	Arsenic		2	02/08/2006 13:25	Joanne M Gates	1
06936	Selenium	SOW ILM04.0	1	01/31/2006 08:44	Joanne M Gates	1
06944	Antimony	SOW ILM04.0	1	01/31/2006 08:44	Joanne M Gates	1
06946	Barium	SOW ILM04.0	1	01/31/2006 08:44	Joanne M Gates	1
06947	Beryllium	SOW ILM04.0	1	01/31/2006 08:44	Joanne M Gates	1
06949	Cadmium	SOW ILMO4.0	1	01/31/2006 08:44	Joanne M Gates	1
06951	Chromium	SOW ILMO4.0		01/31/2006 08:44	Joanne M Gates	1
06952	Cobalt	SOW ILM04.0	1	01/31/2006 08:44	Joanne M Gates	1
06953	Copper	SOW ILM04.0	1		Joanne M Gates	1
06955	Lead	SOW ILM04.0	2	02/08/2006 13:25	Joanne M Gates	1
06958	Manganese	SOW ILM04.0	1	01/31/2006 08:44	Joanne M Gates	1
06961	Nickel	SOW ILM04.0	1	01/31/2006 08:44	Joanne M Gates	1
06966	Silver	SOW ILM04.0	1	01/31/2006 08:44		1
06971	Vanadium	SOW ILM04.0	1	01/31/2006 08:44	Joanne M Gates	1
06972	Zinc	SOW ILM04.0	1	01/31/2006 08:44	Joanne M Gates	1
00383	TOC by Lloyd Kahn	Lloyd Kahn modified	1	02/02/2006 13:11	James S Mathiot	1
01353	Moisture	SOW OLM03.2	1	01/24/2006 16:56	Scott W Freisher	1
01441	рН	sow olm04.3	1	01/24/2006 18:30	Luz M Groff	_
05892	Hexavalent Chromium by IC	SW-846 7199	1	01/25/2006 14:18	William L Hamaker Jr	
05910	Total Cyanide CLP (solid)	SOW ILM04.0	1	01/27/2006 17:46	Venia B McFadden	1
07552	ORP Observed	ASTM D1498	1	01/30/2006 08:30	Michelle L Heidig	1
04562	OLM03.2	SOW OLM03.2	1	01/31/2006 20:33	Richard A Shober	1
	Pesticides/PCBs/Soil					-
04438	OLM03.2 Semivolatiles/Soil	SOW OLM03.2	1	02/07/2006 05:16	Linda M Hartenstine	1
07157	OLM03.2 Volatiles in Soils	SOW OLM03.2	1	01/26/2006 22:15	Jason M Long	0.83
00494	SW CLP Hq Digest	SOW ILM04.0	1	01/29/2006 23:15	Annamaria Stipkovits	
01849	SW CLP ICP Digest	SOW ILM04.0	1	01/29/2006 20:50	Annamaria Stipkovits	
04185	CLP Soil Extraction	SOW OLM03.2	1	01/25/2006 07:00	Danette S Cavalier	1 ·
04607	CLP Soil Extraction	SOW OLM03.2	1	01/23/2006 05:00	Mark P Mastropietro	1
05909	CLP Cyanide Solid	SOW ILM04.0	1	01/25/2006 11:40	Choon Y Tian	1
0000	Distillation					
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	01/20/2006 16:06	Justin M Bowers.	n.a.
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	01/24/2006 22:15	Daniel S Smith	1
01023	HOME OF (ENCIOUS)					





Page 3 of 12

Lancaster Laboratories Sample No. SW 4692571

TIE023:6008:S005020 Soil Sample

Painesville, OH

Collected:01/19/2006 11:30

by MT

Account Number: 06101

Submitted: 01/20/2006 09:00

Reported: 02/16/2006 at 00:55

Discard: 03/03/2006

Tierra Solutions, Inc.

PO Box 1487

Painesville OH 44077

6008-SDG#: PNV88-07

08389 GC/MS - LL Encore Prep SW-846 5035 08389 GC/MS - LL Encore Prep SW-846 5035

01/20/2006 16:20 01/20/2006 16:21 01/20/2006 16:20

Justin M Bowers Justin M Bowers n.a. n.a.





Page 4 of 12

		τ	SEPA - CLP				
			1			PA SAMPI	E NO.
		INORGANIC	ANALYSIS DATA	SHE	ET		 ,
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Name: LANCA	ACTED INDODA	TORIES	Contract:				
Code:		lo.:				DG No.:	
rix (soil/wa			_	La	b Sample	ID: 469	2571
rel (low/med)	i: LOW			Da	te Recei	ved: 01/	/20/06
olide.	86.2	!					
Cor	ncentration	Units (ug/	L or mg/kg dry	we	eight): M	G/KG	
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1.	_7440-36-0 <u>_</u>	Antimony_	1.7	ヷ-	N P_		
	_7440-38-2_1					- '	
	7440-39-3!					- '	
٠.	7440-41-7_	_				• :	
٠.	_7440-43-9_	_				- '	
	7440-70-2		24800			- 1	
	7440-47-3					- :	
	7440-48-4						
• • • • • • • • • • • • • • • • • • • •	_7440~50-8_						
•	_7439-89-6_		33800			- '	
	7439-92-1		16.3			- '	
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